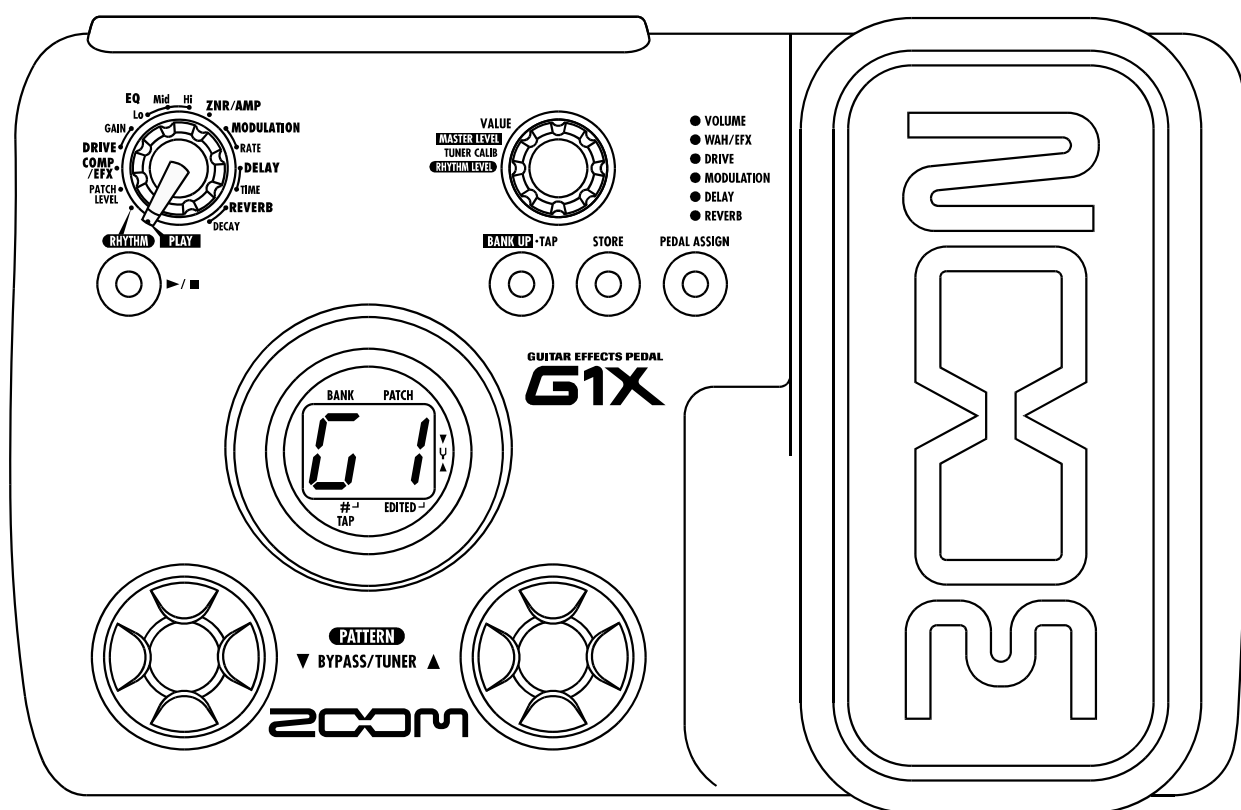


# Service Manual

## GUITAR EFFECTS PEDAL

# G1X



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# zoom

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# Specifications

<b>Effect types</b>	54
<b>Effect modules</b>	max. 8 simultaneous modules
<b>Patch memory</b>	User area: 10 patches x 4 banks = 40 Preset area: 10 patches x 4 banks = 40 Total 80 patches
<b>Sampling frequency</b>	96 kHz
<b>A/D converter</b>	24 bit, 128 times oversampling
<b>D/A converter</b>	24 bit, 128 times oversampling
<b>Signal processing</b>	32 bit
<b>Frequency response</b>	20 Hz – 40 kHz +1.0 dB – 4.0 dB (10kilohms load)
<b>Display</b>	2-digit 7-segment LED
<b>Input</b>	Standard mono phone jack
<b>Rated input level</b>	-20 dBm
<b>Input impedance</b>	470 kilohms
<b>Output</b>	Standard stereo phone jack (doubles as line/headphone jack)
<b>Maximum output level</b>	Line +3 dBm (output load impedance of 10 kilohms or more) Phones 20mW + 20mW (into 32ohms load)
<b>Power requirements</b>	
<b>AC adapter</b>	9 V DC, 300 mA (center minus plug) (ZOOM AD-0006)
<b>Batteries</b>	Four IEC R6 (size AA) batteries, approx. 12 hours continuous operation (alkaline batteries)
<b>Dimensions</b>	155 mm (D) x 234 mm (W) x 52 mm (H)
<b>Weight</b>	600 g (without batteries)

- 0 dBm = 0.775 Vrms
- Design and specifications subject to change without notice.

# Function Test

## Starting in “Test mode”

- 1) Start up the G1X in the following ways using the AC adaptor AD-0006.
  - a) Connect AC adaptor holding the [BANK UP•TAP] key (SW1) and [RHYTHM] key (SW2).
  - b) Connect AC adaptor when Ground and the test point TP1.  
\*When set 4 batteries, connect the plug into INPUT connector (J2)
- 2) All the LEDs of 7 segment LED will be lit.

## 1. Display (7 segment LED)

- 1) Make sure that all LEDs are lit brightly enough (indicate “8.8.”) after power on in “Test mode”.
- 2) Press any key and make sure that all LEDs will be turned off.

## 2. Module selector

- 1) Turn the Module selector (VR1) clockwise to “DECAY”.
- 2) Turn the Module selector (VR1) anticlockwise by one detent.  
Make sure that the following indications appear on the 7 segment LED.

Module selector	7 segment LED
DECAY	15
REVERB	14
TIME	13
DELAY	12
RATE	11
MODULATION	10
ZNR/AMP	9
EQ_Hi	8
EQ_Mid	7
EQ_Lo	6
GAIN	5
DRIVE	4
COMP/EFX	3
PATCH LEVEL	2
RHYTHM	1
PLAY	0

- 3) Turn the Module selector (VR1) clockwise by one detent.  
Make sure that the above values are indicated on the 7 segment LED depending on the Module selector position.  
Like figure 1 of the following page, make sure that replaced by right numerical value at a click point and intermediate between click point.  
In a range of the same click point, numerical value replaced is NG.

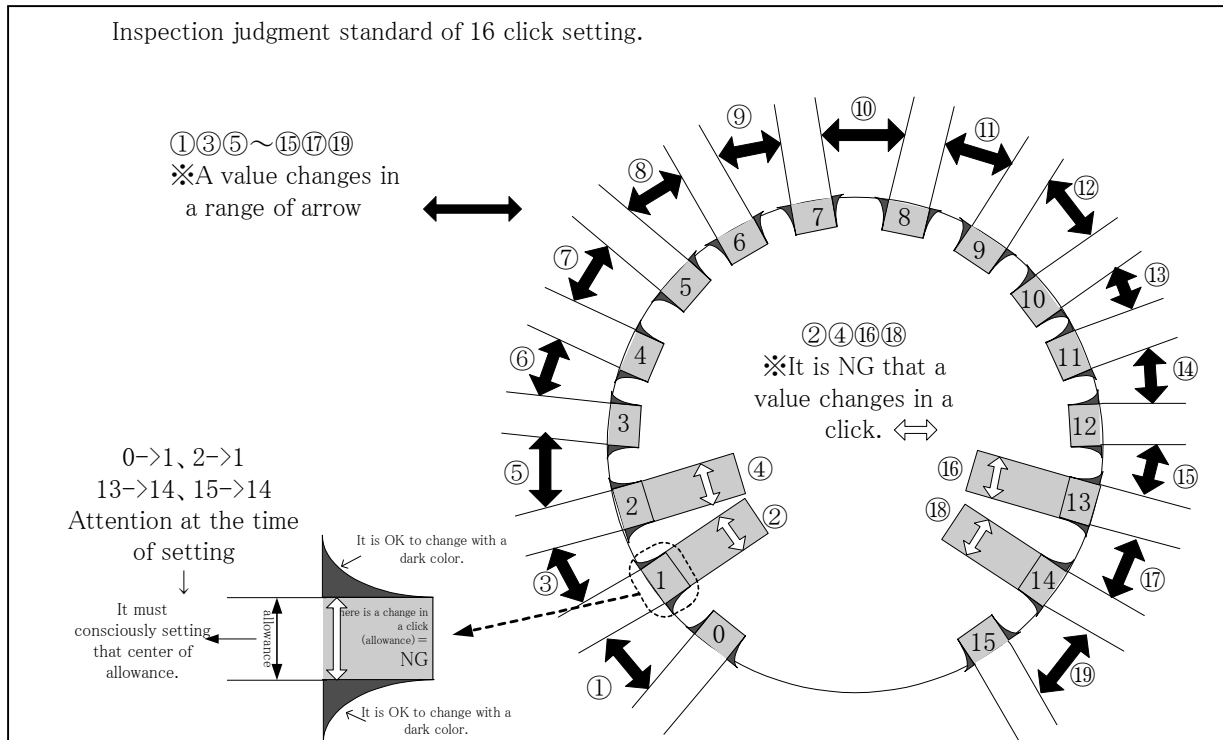


Figure 1.16 clicks value confirmation position

### 3. Knob

Turn the [VALUE] knob (SW6) and 7 segment LED indicates “00–FF”.  
Make sure that indication smoothly changes in the range of “00–FF” and the value changes 1 step by 1 detent.

### 4. Flash ROM

Press the [BANK UP • TAP] key (SW1).  
Make sure that “ok” appears on the 7 segment LED.  
If any error occurs, “nG” is indicated on the 7 segment LED.

### 5. Product number

- 1) Press the FOOT SWITCH [^] (SW5).  
Make sure that “GP” is indicated on the 7 segment LED.
- 2) Press the FOOT SWITCH [^] (SW5) again.
  - i) Serial No. 000001 - 022150  
Make sure that “87” or “11” are indicated on the 7 segment LED.
  - ii) Serial No. 022151 –  
Make sure that “d2” is indicated on the 7 segment LED.

## 6. PEDAL ASSIGN check

Press the PEDAL ASSIGN key, and make sure that the 7segment LED is displayed [SL]. And make sure that the PEDAL ASSIGN LED turns on in the order of “VOL ->WAH -> DRY ->MOD ->DLY ->REV -> turns off”, whenever the key is pressed.

## 7. EX Pedal

The 7segment LED is displayed EX PEDAL's AD value if the PEDAL is moved. Make sure that this EX PEDAL's AD value is the same as below table.

Expression pedal	Values
MIN(raise)	09 - 29
MAX(down)	30 - 80
Pushed all the way	[VOLUME] LED blinking

Make sure that difference between MIN and MAX is 20 or more in hex and this value doesn't decrease if EX PEDAL is pressed down.

Make sure that all PEDAL ASSIGN LEDs are blinking by pressing down the EX PEDAL stronger.

## 8. Through sound

Input sine wave (440Hz, -20dBm) to the [INPUT] jack (J2) and monitor the output from the [OUTPUT] jack (J4) with loudspeakers and oscilloscope.

Make sure that the sounds from both channel of [OUTPUT] jack (J4) are at the same volume, without any noise and improper sound.

If “Mt” or “dL” is indicated on the 7 segment LED, press any key among [BANK UP • TAP] key (SW1), [STORE] (SW3) and FOOT SWITCH [^] (SW5). Then make sure that indication is changes to other.

## 9. SRAM (Delay sound)

1) Press [RHYTHM] (SW2) key and display indicates “dL”.

2) Input sine wave (440Hz, -20dBm) to the [INPUT] jack (J2) and monitor the output from the [OUTPUT] jack (J4) with loudspeakers and oscilloscope.

Make sure that the normal signal is output from Rch and the delayed signal is output from the Lch of [OUTPUT] jack (J4) when “dL” is constantly indicated.

## 10. DSP mute

1) Press FOOT SWITCH [v] (SW4) and display indicates “Mt”.

2) Input sine wave (440Hz, -20dBm) to the [INPUT] jack (J2) and monitor the output from the [OUTPUT] jack (J4) with loudspeakers and oscilloscope.

Make sure that there is no output when “Mt” is constantly indicated.

## 11. Restoring Factory Defaults

- 1) Power on in normal mode.

If 7segment LED doesn't blink "AL", power on pressing the "STORE" key.

Note) If someone make the operation below, after that 7segment LED never show "AL"

- 2) Make sure that display blinks "AL"
- 3) Press [STORE] key (SW3) and display indicates "ok".
- 4) The units automatically reboot in normal mode.

## 12. Sound check 1

- 1) Connect AC adaptor and the unit's power on.
- 2) Make sure that display indicates [A0].
- 3) Press the FOOT SWITCH [^] (SW5) two times and make sure that display changes to [A2].
- 4) Input sine wave (440Hz, -20dBm).
- 5) Monitor output sound by speaker or oscilloscope and make sure the points below.  
Output sound is distorted.  
Sound doesn't include abnormal noise, and this sound isn't abnormal sound.
- 6) Make sure that frequency of 1 Octave change by moving the EX-PEDAL.

## 13. Sound check 2

- 1) Press the FOOT SWITCH [v] (SW4) and make sure that display changes to [A1].
- 2) Input sine wave (440Hz, -20dBm)
- 3) Monitor output sound by speaker or oscilloscope and make sure the points below.  
Output sound is modulated.  
Sound doesn't include abnormal noise, and this sound isn't abnormal sound.
- 4) Add mechanical shock to the units a few times and make sure there are no any problem like noise or sound stop.

#### **14. Battery**

- 1) Disconnect AC adaptor and set the power supply voltage to 6.0 V.
- 2) Make sure that “A0” is indicated on the 7 segment LED.
- 3) Set the power supply voltage to 3.7 V.  
Make sure that the indication “bt” appears on the 7 segment LED.
- 4) Set the power supply voltage to 4.6 V.  
Make sure that the 7 segment LED indication returns to the previous state.

#### **15. Stability**

Put the G1X on a surface plate, and push it diagonally.  
Make sure that there is no remarkable space (less than  $\pm 0.3$  mm is acceptable).



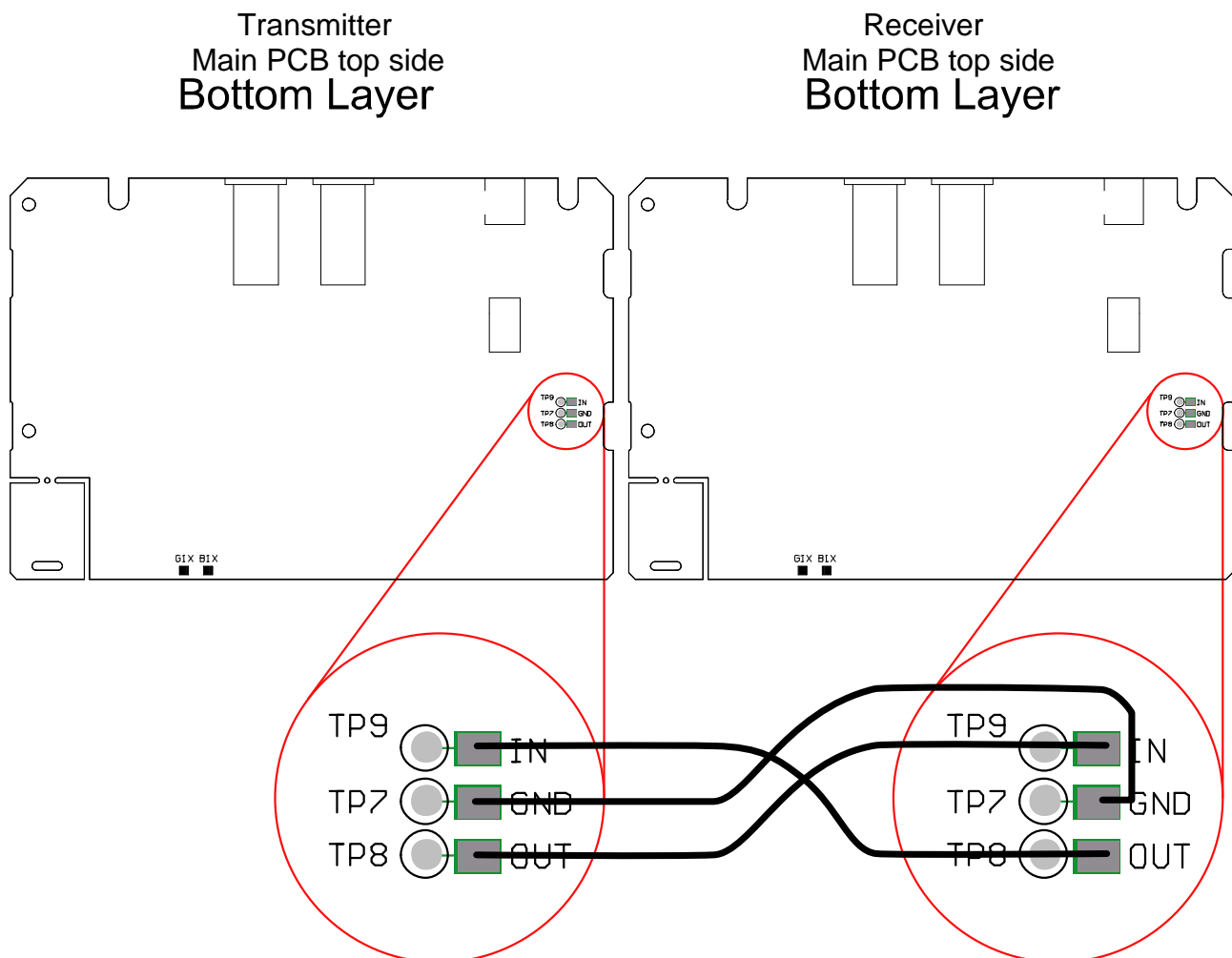
# Back Up User's Data

If necessary, back up the user's effect patch data to avoid an accidental erasing.

## Required

- User's G1X as a transmitter (hereinafter referred to as “the transmitter”)
- Another G1X as a receiver (hereinafter referred to as “the receiver”)
- Jumper wires

1. Remove the bottom plate.
2. Connect “IN” terminal of the transmitter and “OUT” terminal of the receiver.
3. Connect “OUT” terminal of the transmitter and “IN” terminal of the receiver.
4. Connect their ground terminals on the top side of the main PCB, using jumper wires (See below).



5. Turn on the power of both transmitter and receiver while holding the [STORE] (SW3) and the [BANK UP•TAP] (SW1) keys.  
Make sure that the both 7segment LED lit "tr".

6. Press the [BANK UP•TAP] key (SW1) of the receiver, and make sure that the 7 segment LED lit "rx". The receiver is ready to receive the data.
7. Press the [Rhythm] key (SW2) of the transmitter and make sure that the 7 segment LED lit "tx". The indication flashes on and off at once. And the transmitter starts to send the data. When sending and receiving finish successfully, and make sure that Transmitter and Receiver's both 7 segment LED are displayed same check-sum.
8. Turn the both transmitter and receiver off.
9. Take the wires away and attach the bottom plate.

# Recovering the Factory Default

In the factory default condition, the patches of the user area (A0-d9) contain the same settings as the patches of the preset area (00-39).

Even after overwriting the user patches, their original content can be restored in a single operation (“All Initialize” function).

If necessary, back up the user’s patch data. Refer to page 9, 10 for details of the back up.

1. Turn the power on while holding the [STORE] key (SW3).

The indication “AL” appears on the display.

2. To carry out the All Initialize function, press the [STORE] key (SW3) once more.

All patch settings are returned to the factory default condition, and the unit switches to play mode. To cancel All Initialize, press the [RHYTHM] key (SW2) instead of the [STORE] key (SW3).

# Special function start up

## 1. Special function and how to start up

There are some methods to start up the G1X for service.

All special functions start up the G1X in the following ways using the AC adaptor AD-0006 or connecting the plug into INPUT connector (J2) when set the battery.

Turn on the G1X holding the key in the following table.

See the following table about Special function.

Function	Keys held down
Test mode	RHYTHM + BANK UP • TAP
16 click adjust	STORE + RHYTHM
Back up user's data	STORE + BANK UP • TAP
ALL Initialization	STORE
Pedal calibration	PEDAL ASSIGN
Pre-select	UP ([^])
Revision	RHYTHM + DOWN ([v])
Version	BANK UP • TAP + UP ([^])

## 2. Details of special function

Test mode

This startup is used for the function Test.

Refer to page 4.

16 click adjust

Adjust the threshold of 16 click vol. (from 0 click to 15 click)

1) Start up holding the [STORE] key (SW3) and [RHYTHM] key (SW2).  
Make sure “1” appears on the 7 segment LED.

2) Turn the Module selector (VR1) clockwise by one detent.  
Press the [STORE] key (SW3). \*Refer to the figure below.  
Make sure “2” appears on the 7 segment LED.

3) Turn the Module selector (VR1) clockwise by one detent.  
Press the [STORE] key (SW3).  
Repeat this sequence to “DECAY”.  
(When “PATCH LEVEL”, 7 segment LED is displayed “3”.  
When “COMP/EFX”, 7 segment LED is displayed “4”.

·  
·  
·

When “REVERB”, press the [STORE] key (SW3), 7 segment LED is displayed “15”.  
Make sure “-14” appears on the 7 segment LED.

4) Turn the Module selector (VR1) anticlockwise by one detent.  
Press the [STORE] key (SW3).  
Make sure “-13” appears on the 7 segment LED.

5) Turn the Module selector (VR1) anticlockwise by one detent.

Press the [STORE] key (SW3).

Repeat this sequence to "PLAY".

( When "TIME", 7 segment LED is displayed "-12".

When "DELAY", 7 segment LED is displayed "-11".

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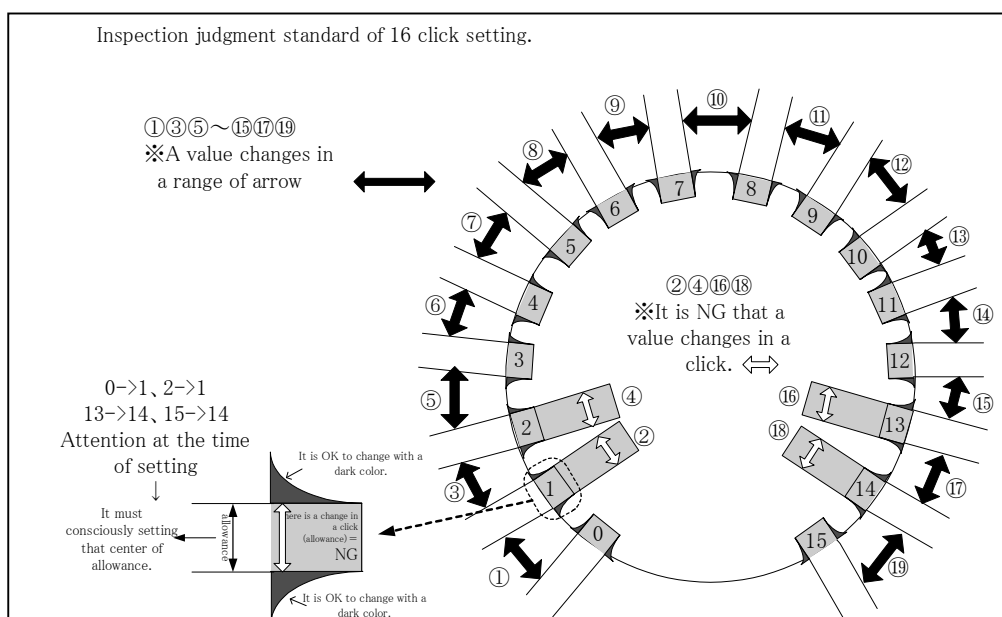
When "RHYTHM", 7 segment LED is displayed "0". )

Make sure "ok" appears on the 7 segment LED.

6) Make sure that the following indications appear on the 7 segment LED.

When the 7 segment LED is correctly displayed, Restart the G1X by press the [BANK UP • TAP] key (SW1).

Module selector	7 segment LED
PLAY	0
RHYTHM	1
PATCH LEVEL	2
COMP/EFX	3
DRIVE	4
GAIN	5
EQ Lo	6
EQ Mid	7
EQ Hi	8
ZNR/AMP	9
MODULATION	10
RATE	11
DELAY	12
TIME	13
REVERB	14
DECAY	15



## ALL Initialization

This startup recovers the factory default condition.  
Refer to page 10.

## Pedal calibration

Used to readjust the expression pedal operation.  
Refer to page 26 of the G1/G1X operation manual.

## Pre-select

See the Operation Manual.

## Back up user's data

This startup is used for back up user's data.  
Refer to page 8.

## Version

The 7 segment LED is displayed system version of the G1.

\* It is displayed in four digits.

- 1) Start up holding the [BANK UP • TAP] key (SW1) and the FOOT SWITCH [^] (SW5).

Make sure "00" appears on the 7 segment LED.

- 2) Press the FOOT SWITCH [^](SW5) or [v] (SW4).

- i) Serial No. 000001 - 022150

Make sure "10" appears on the 7 segment LED.

- ii) Serial No. 022151 –

Make sure "12" appears on the 7 segment LED.

- 3) Restart the G1X by press the FOOT SWITCH [^] (SW5) or [v] (SW4) again.

## Revision

The 7 segment LED is displayed system revision of the G1.

\* It is displayed in four digits.

- 1) Start up holding the [RHYTHM] key (SW2) and the FOOT SWITCH [v] (SW4).

Make sure "00" appears on the 7 segment LED.

- 2) Press the FOOT SWITCH [^] (SW5) or [v] (SW4).

- i) Serial No. 000001 - 022150

Make sure "46" appears on the 7 segment LED.

- ii) Serial No. 022151 –

Make sure "48" appears on the 7 segment LED.

- 3) Restart the G1X by press the FOOT SWITCH [^] (SW5) or [v] (SW4) again.

# Circuit Check Specifications

- 15 -

No.	Items	Ch	Specifications	Inputs	Conditions/notes	Display and Indicator	Keys pressed in "Test mode"
1	Current consumption		125mA±20mA	Short	Immediately after Test mode starts All LEDs are lit.	All lit	None (Start up)
2	Power supply voltage		3.3V±0.15V	Short	Immediately after Test mode starts All LEDs are lit.	All lit	None(Start up)
	+3.3VD		3.3V±0.15V	Short	Immediately after Test mode starts All LEDs are lit.	All lit	None(Start up)
	+1.26VD		1.25V±0.05V	Short	Immediately after Test mode starts All LEDs are lit.	All lit	None(Start up)
	-5VA		-4.75V±0.25V	Short	Immediately after Test mode starts All LEDs are lit.	All lit	None(Start up)
3	Output level	( L )	-22.5dBm±2dB	440Hz -20dBm	Load=32 ohms / Output waveform is not clipped.	All lit	None(Start up)
	(Load: 32 ohms)	( R )	-22.5dBm±2dB	440Hz -20dBm	Load=32 ohms / Output waveform is not clipped.	All lit	None(Start up)
4	Frequency response	( L )	-21.0dBm±2dB	20Hz -20dBm	Output waveform is not clipped.	All lit	None(Start up)
	(No Load)	( R )	-21.0dBm±2dB	20Hz -20dBm	Output waveform is not clipped.	All lit	None(Start up)
		( L )	-39.0dBm±2dB	20kHz -40dBm	Output waveform is not clipped.	All lit	None(Start up)
		( R )	-39.0dBm±2dB	20kHz -40dBm	Output waveform is not clipped.	All lit	None(Start up)
5	Noise level	( L )	-90.0dBm or less	Short	Insert IHF-A, 15KHz-LPF.	All lit	None(Start up)
	(No Load)	( R )	-80.0dBm or less	Short	Insert IHF-A, 15KHz-LPF.	All lit	None(Start up)
6	Harmonic distortion	( L )	0.1% or less	440Hz -20dBm	Delay Mode / Insert 15KHz-LPF.	"dL"	"RHYTHM" key(SW2)
	(No Load)	( R )	0.15% or less	20kHz -20dBm	Delay Mode / Insert 15KHz-LPF.	"dL"	"RHYTHM" key(SW2)
7	Function of D-MUTE	( L )	Check function of Mute	440Hz -20dBm	Press "BANK DOWN" key and check muting on/off.	"nt"	"BANK DOWN" key(SW4)
	(DSP Mute)	( R )	Check function of Mute	440Hz -20dBm	Press "BANK DOWN" key and check muting on/off.	"nt"	"BANK DOWN" key(SW4)
8	Battery warning voltage		3.7V or less (Warning voltage)		Make sure that "bt" on display is blinked at 3.7V.	"bt" blinked	
			4.5V or more (released warning)		Make sure that the warning is released at 4.5V.	Return to normal status	
9	EX PEDAL operation	MIN	09-29	EX PEDAL	Make sure that displayed value is "09 or more, 29 or less" by hexadecimal.	Pedal value	"PEDAL ASSIGN" key(SW7)
		MAX	30-80	EX PEDAL	Make sure that displayed value is "30 or more, 80 or less" by hexadecimal.	Pedal value	"PEDAL ASSIGN" key(SW7)
10	System operation				Make sure that keys, dial(16click), knobs, and LEDs normally operate.		

\* Conditions (if there is no note)

Power supply

Input signal

Output load

AC adaptor AD-0006

Sine wave to [INPUT] jack

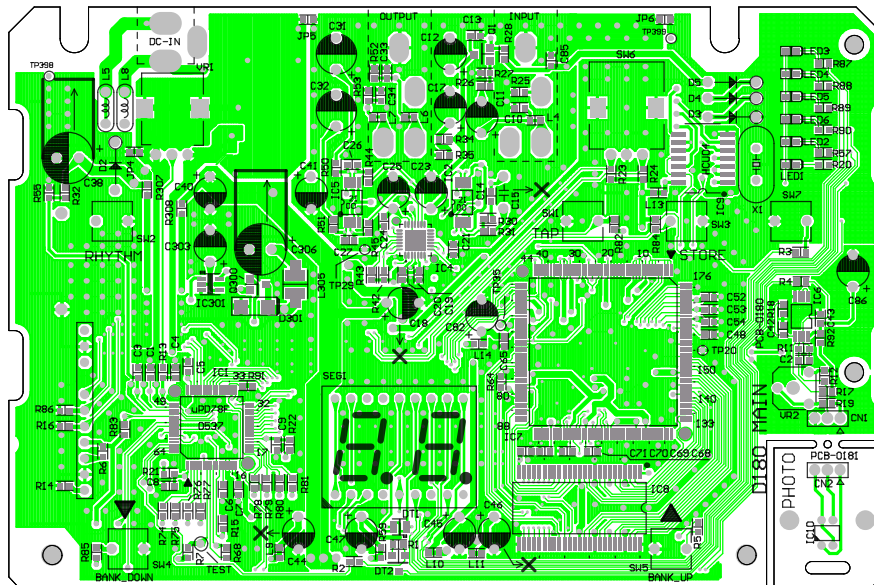
None (100 kilohms or more)

PHONES: 32 ohms

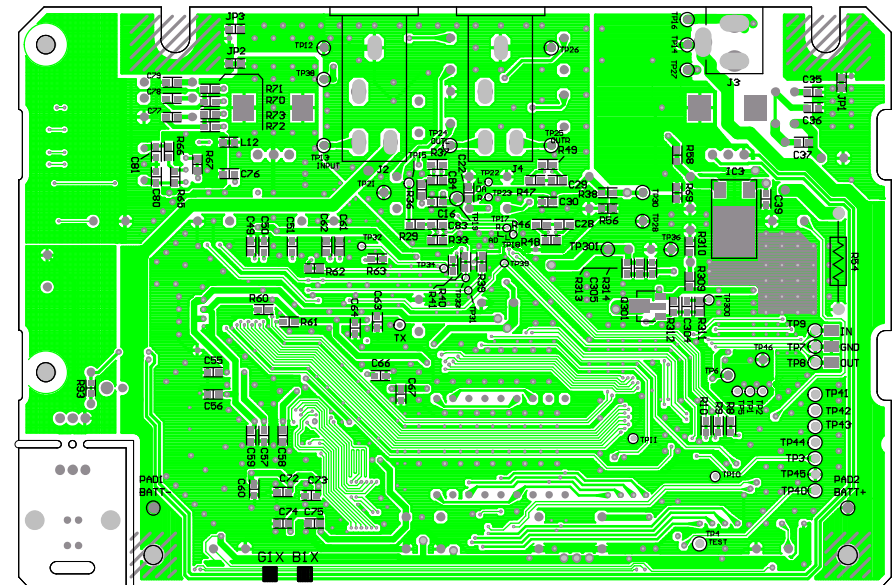
# PCB Parts Layout and Pattern

## PCB-0180, PCB-0181

Top Layer



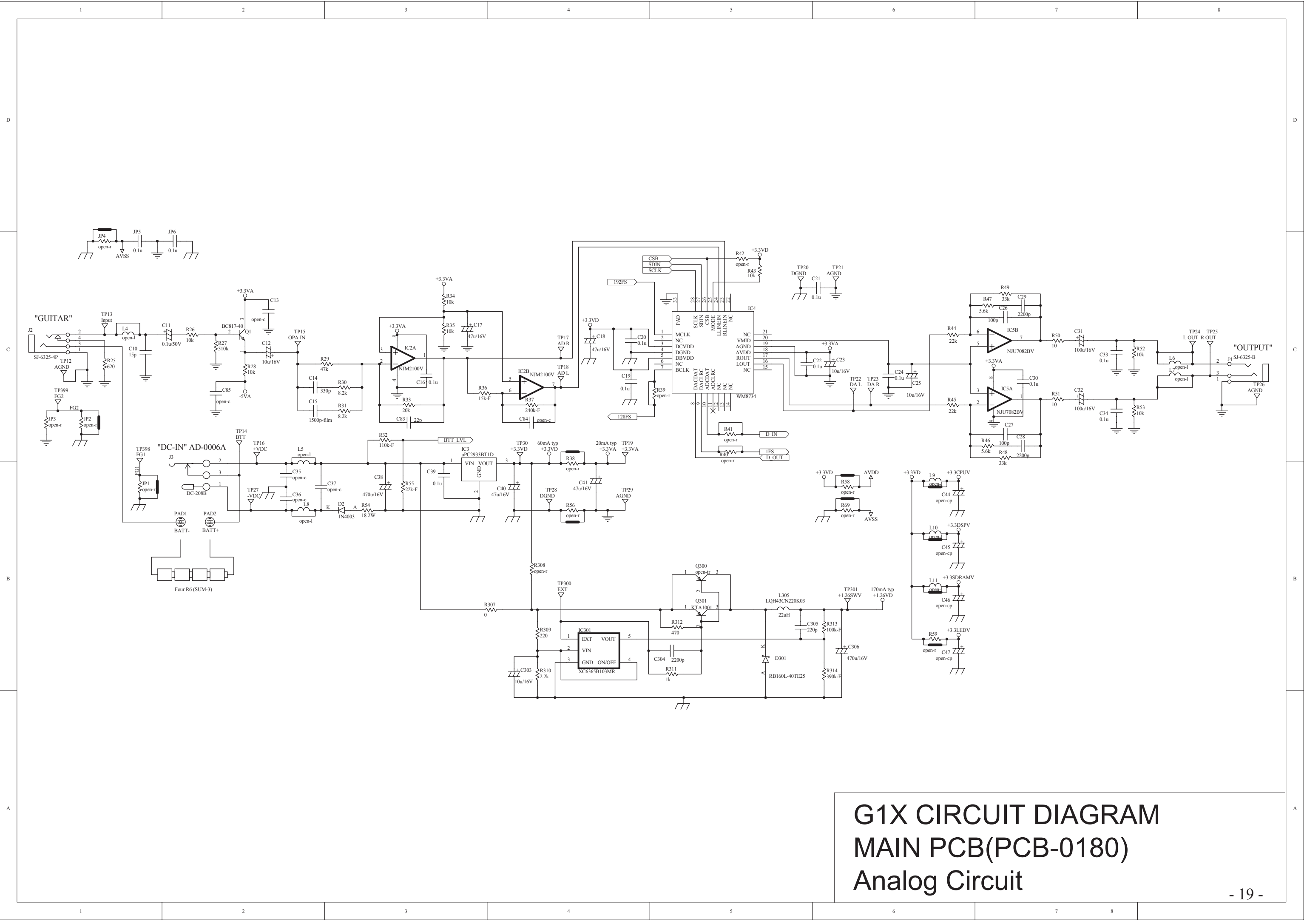
Bottom Layer

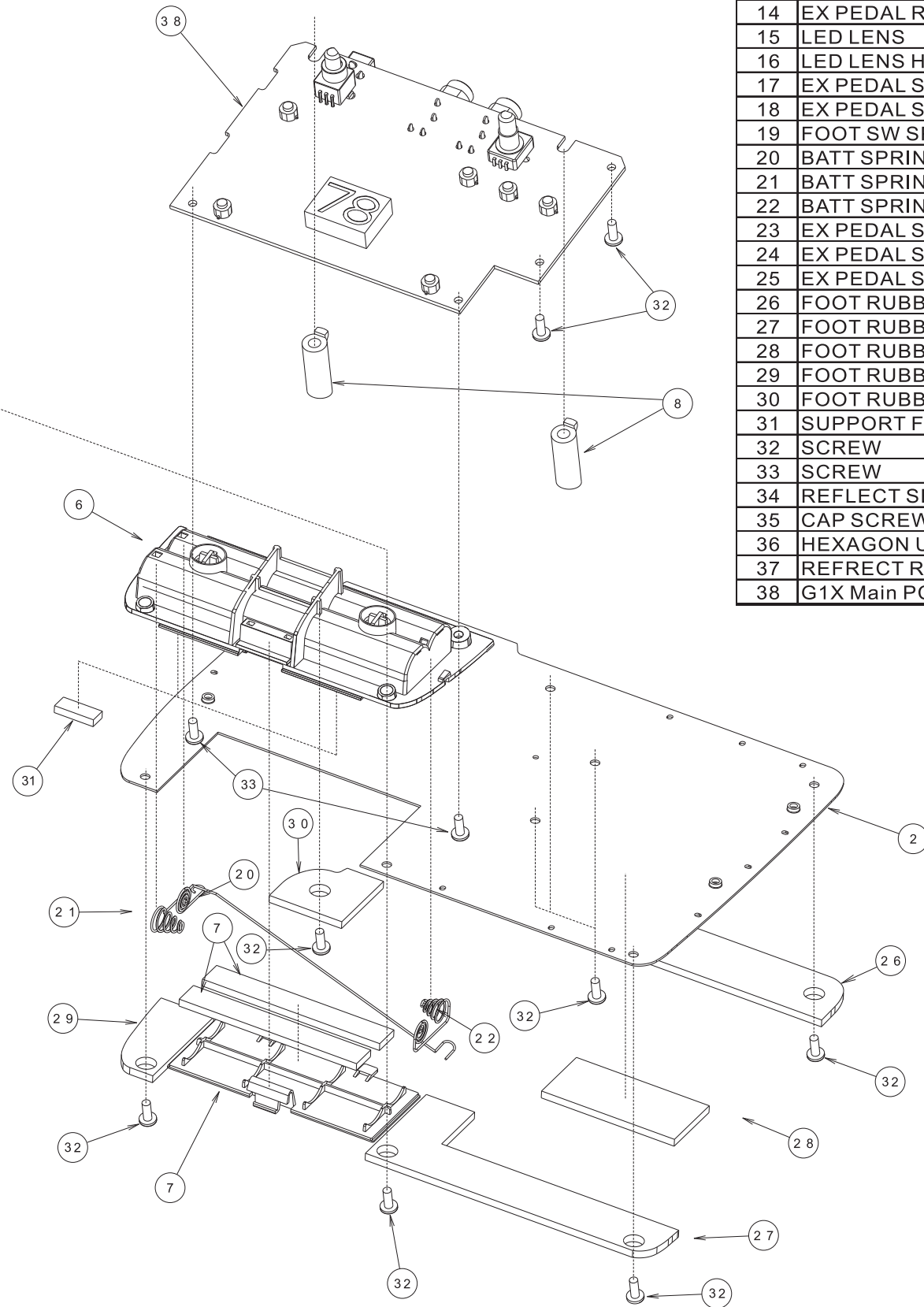
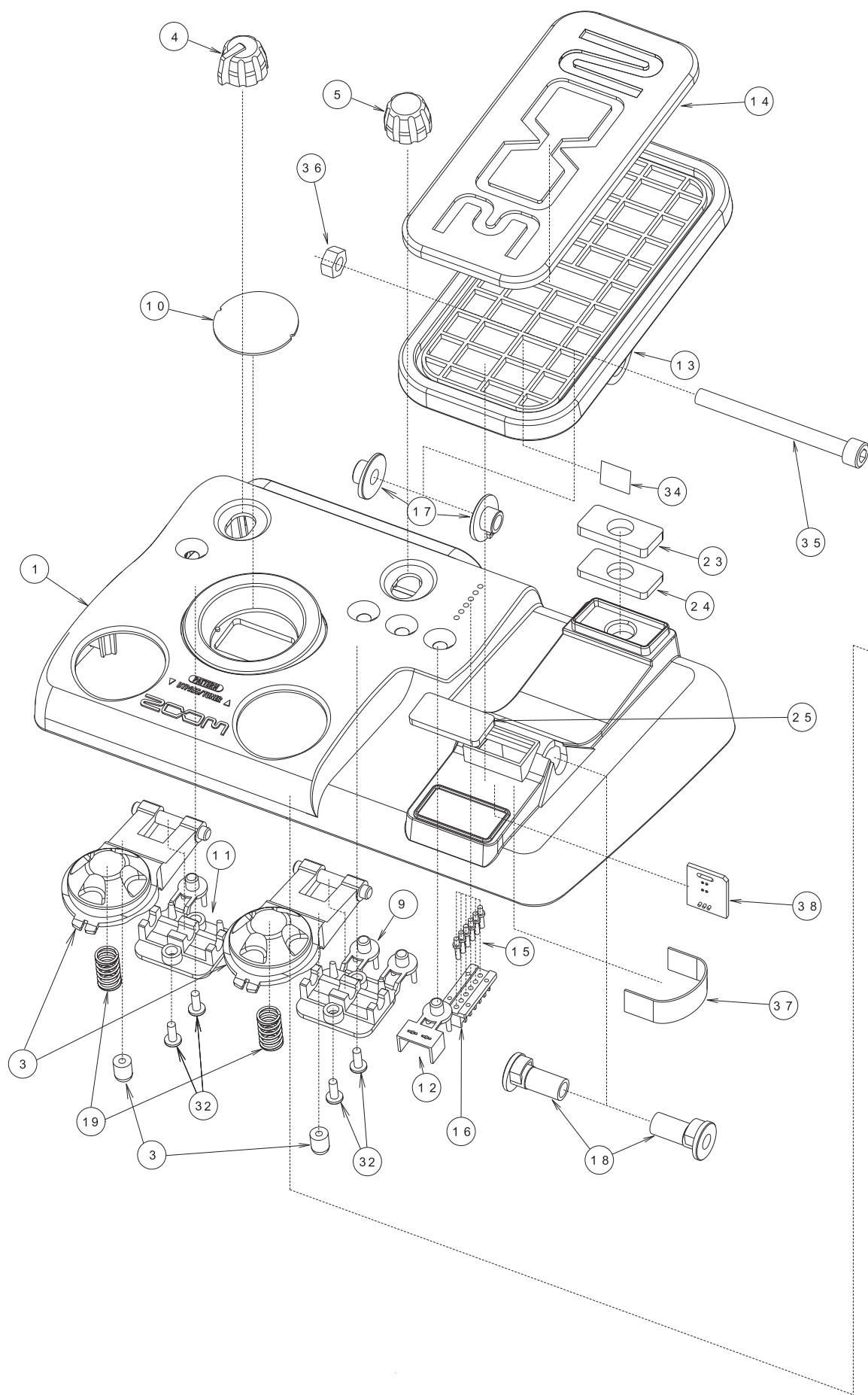










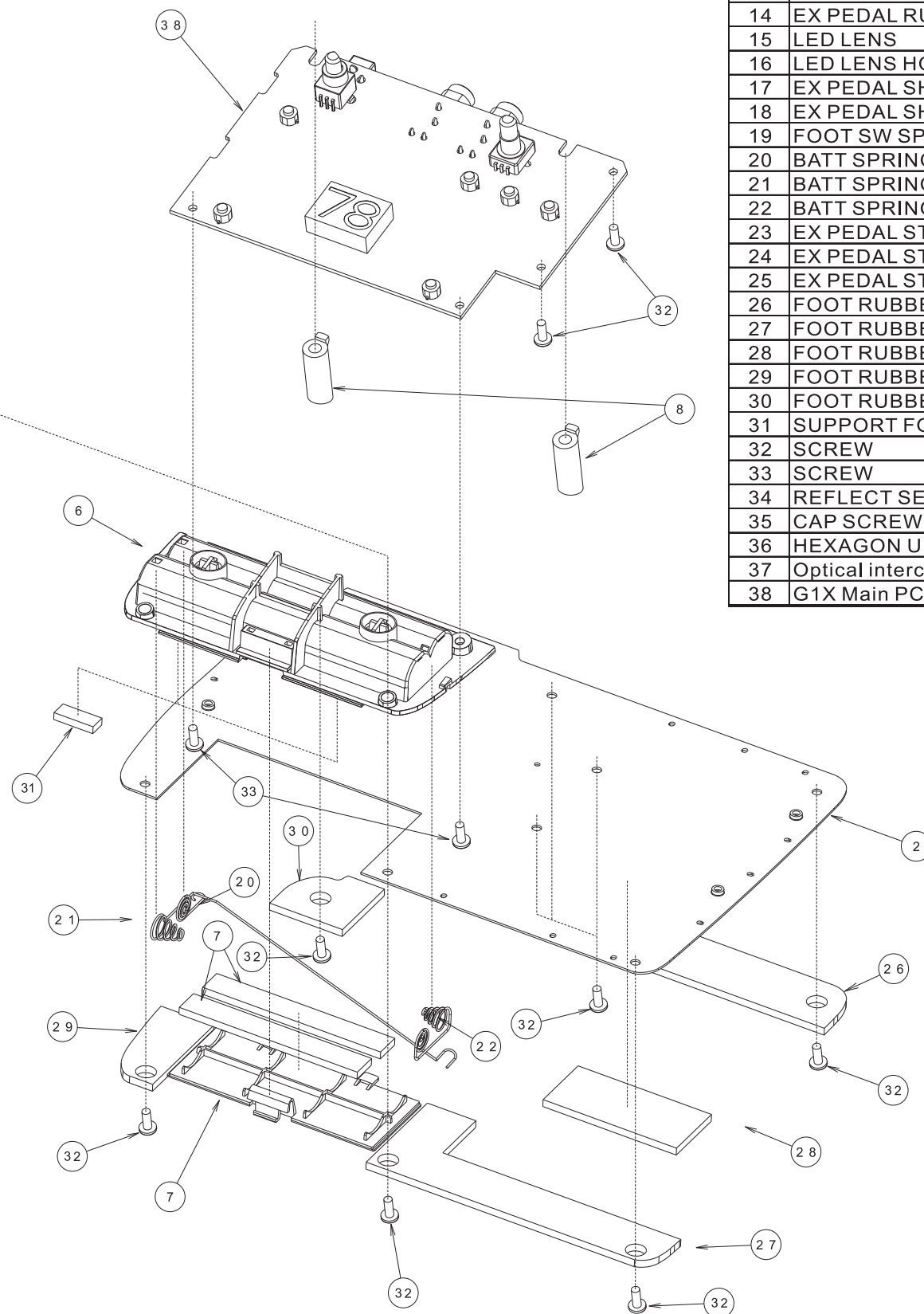
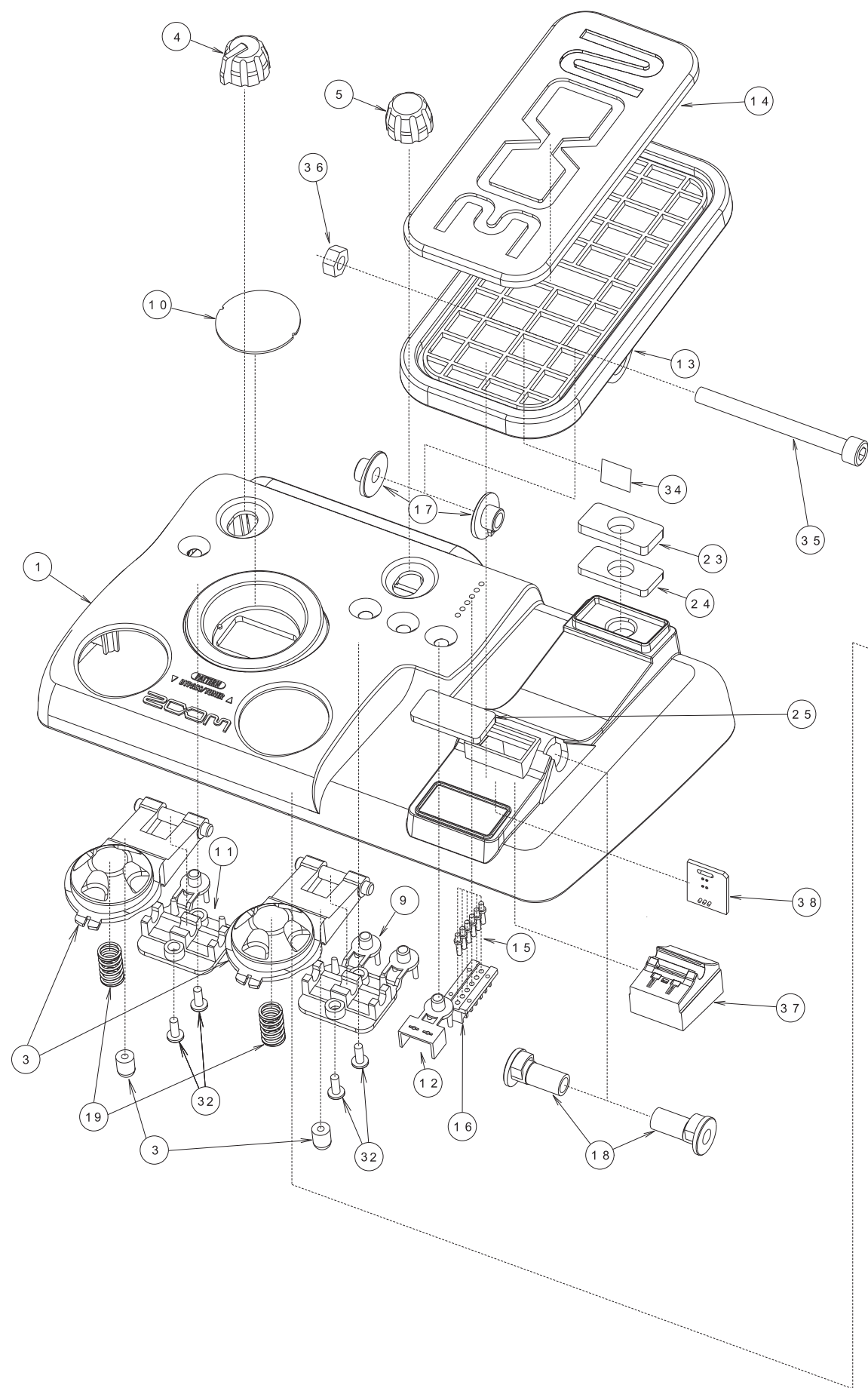


No.	PART NAME	DRAWING NO	Code No.	Q'TY
1	TOP CASE	Z2B-0255	SP02391	1
2	BOTTOM CASE	Z2A-0141	SP02392	1
3	FOOT SW ASSY	Z2B-0227, Z2D-0067	SP02360	2
4	VR KNOB 1	Z2B-0228-B	SP02361	1
5	VR KNOB 2	Z2B-0229	SP02362	1
6	BATT CASE	Z2B-0230	SP02376	1
7	BATT CASE COVER ASSY	Z2B-0231, Z2E-0190	SP02377	1
8	PCB SPACER	Z2B-0232	SP02373	2
9	FOOT SW PLATE R	Z2B-0233	SP02374	1
10	G1 DISPLAY SHEET	Z2E-0216	SP02363	1
11	FOOT SW PLATE L	Z2B-0234	SP02375	1
12	TACT SW BUTTON	Z2B-0256	SP02395	1
13	EX PEDAL	Z2B-0257	SP02393	1
14	EX PEDAL RUBBER	Z2B-0258	SP02396	1
15	LED LENS	Z2B-0259	SP02404	6
16	LED LENS HOLDER	Z2B-0260	SP02405	1
17	EX PEDAL SHAFT GUIDE	Z2B-0176	SP02104	2
18	EX PEDAL SHAFT GUIDE B	Z2B-0269	SP02394	2
19	FOOT SW SPRING	Z2A-0126	SP02369	2
20	BATT SPRING (+)	Z2A-0127	SP02370	1
21	BATT SPRING (-)	Z2A-0128	SP02371	1
22	BATT SPRING (+/-)	Z2A-0129	SP02372	1
23	EX PEDAL STOPPER 1	Z2D-0073	SP02397	1
24	EX PEDAL STOPPER 2	Z2D-0074	SP02398	1
25	EX PEDAL STOPPER 3	Z2D-0082	SP02399	1
26	FOOT RUBBER 1-L	Z2D-0075	SP02400	1
27	FOOT RUBBER 2-L	Z2D-0078	SP02401	1
28	FOOT RUBBER 3-L	Z2D-0079	SP02402	1
29	FOOT RUBBER 1-R	Z2D-0070	SP02366	1
30	FOOT RUBBER 2-R	Z2D-0071	SP02367	1
31	SUPPORT FOOT RUBBER	Z2D-0072	SP02368	2
32	SCREW	M3x8 P-tight	SP01185	14
33	SCREW	M3x10 P-tight	SP02074	2
34	REFLECT SEAL	Z2E-5032-A4	SP01535	1
35	CAP SCREW	M6x65	SP02119	1
36	HEXAGON U NUT	M6	SP01548	1
37	REFRECT RUBBER 2	Z2D-0091		1
38	G1X Main PCB assy	PCB-0180, PCB-0181	SP40175	1

# Exploded View

Serial No.  
000001 - 022150





No.	PART NAME	DRAWING NO	Code No.	Q'TY
1	TOP CASE	Z2B-0255	SP02391	1
2	BOTTOM CASE	Z2A-0141	SP02392	1
3	FOOT SW ASSY	Z2B-0227, Z2D-0067	SP02360	2
4	VR KNOB 1	Z2B-0228-B	SP02361	1
5	VR KNOB 2	Z2B-0229	SP02362	1
6	BATT CASE	Z2B-0230	SP02376	1
7	BATT CASE COVER ASSY	Z2B-0231, Z2E-0190	SP02377	1
8	PCB SPACER	Z2B-0232	SP02373	2
9	FOOT SW PLATE R	Z2B-0233	SP02374	1
10	G1 DISPLAY SHEET	Z2E-0216	SP02363	1
11	FOOT SW PLATE L	Z2B-0234	SP02375	1
12	TACT SW BUTTON	Z2B-0256	SP02395	1
13	EX PEDAL	Z2B-0257	SP02393	1
14	EX PEDAL RUBBER	Z2B-0258	SP02396	1
15	LED LENS	Z2B-0259	SP02404	6
16	LED LENS HOLDER	Z2B-0260	SP02405	1
17	EX PEDAL SHAFT GUIDE	Z2B-0176	SP02104	2
18	EX PEDAL SHAFT GUIDE B	Z2B-0269	SP02394	2
19	FOOT SW SPRING	Z2A-0126	SP02369	2
20	BATT SPRING (+)	Z2A-0127	SP02370	1
21	BATT SPRING (-)	Z2A-0128	SP02371	1
22	BATT SPRING (+/-)	Z2A-0129	SP02372	1
23	EX PEDAL STOPPER 1	Z2D-0073	SP02397	1
24	EX PEDAL STOPPER 2	Z2D-0074	SP02398	1
25	EX PEDAL STOPPER 3	Z2D-0082	SP02399	1
26	FOOT RUBBER 1-L	Z2D-0075	SP02400	1
27	FOOT RUBBER 2-L	Z2D-0078	SP02401	1
28	FOOT RUBBER 3-L	Z2D-0079	SP02402	1
29	FOOT RUBBER 1-R	Z2D-0070	SP02366	1
30	FOOT RUBBER 2-R	Z2D-0071	SP02367	1
31	SUPPORT FOOT RUBBER	Z2D-0072	SP02368	2
32	SCREW	M3x8 P-tight	SP01185	14
33	SCREW	M3x10 P-tight	SP02074	2
34	REFLECT SEAL	Z2E-5032-A4	SP01535	1
35	CAP SCREW	M6x65	SP02119	1
36	HEXAGON U NUT	M6	SP01548	1
37	Optical interception cover	Z2D-0092	SP02403	1
38	G1X Main PCB assy	PCB-0180, PCB-0181	SP40175	1

# Exploded View

Serial No.  
022151 -

# Parts List

\*Serial No. 000001 - 022150

## MAIN PCB Partslist

PCB-0180

No.	NAME	SUB	SPECIFICATIONS	DESCRIPTION	REFERENCE No.	Q'ty
1	MPU	*16	UPD78F0537GB(T)-UEU-A	LQFP-64pin 10x10	IC1	0
	MPU	*16	UPD78F0537GB(T)-601-UEU-A	LQFP-64pin 10x10	IC1	1
2	DSP		ZFX-3	LQFP-176pin 0.5-26X26	IC7	1
3	SDRAM	*2	P2V16S406TP-6G	TSOP-50pin	IC8	0
	SDRAM	*2	IS42S16100C1-7TL	TSOP-50pin	IC8	0
	SDRAM	*2	RMS116T(LF)-7A	TSOP-50pin	IC8	0
	SDRAM	*2	EM636165TS-7G	TSOP-50pin	IC8	1
4	AD/DA		WM8734SEFLR	QFN-28pin 5x5	IC4	1
5	LOGIC IC	*3	SN74HCU04ANSR	SOP-14pin	IC9	1
	LOGIC IC	*3	SN74HCU04DR	SOIC-14pin	IC9	0
	LOGIC IC	*3	SN74LVU04ANSR	SOP-14pin	IC9	0
	LOGIC IC	*3	SN74HCU04NSR	SOP-14pin	IC9	0
	LOGIC IC	*3	MC74HCU04ADR	SOIC-14pin	IC9	0
6	OPAMP		NJM2100V-TE1	SSOP-8pin	IC2 IC6	2
7	OPAMP		NJU7082BV-TE1	SSOP-8pin	IC5	1
8	Voltage Regulator	*4	uPC2933BT1D-AT	TO252	IC3	0
	Voltage Regulator	*4	uPC2933BT-AZ	SC63	IC3	0
	Voltage Regulator	*4	LR1116AL-33-TN3-D-R	TO252	IC3	1
9	DC-DC converter		XC6365B103MR	SOT-23-5	IC301	1
10	D-Transistor	*5	MUN5135DW1T1G	SC88	DT1	1
	D-Transistor	*5	UMB10N	SC88	DT1	0
11	D-Transistor	*17	DTA-123JKA	SC59	DT2	1
	D-Transistor	*17	KRA105S	SOT23	DT2	0
	D-Transistor	*17	BCR158	SOT23	DT2	0
12	Transistor	*6	BC817-40	SC59	Q1	1
	Transistor	*6	BC817-40LT1G	SC59	Q1	0
13	Transistor		KTA1001-Y	SC62	Q301	1
14	Transistor		open-tr	SC59	Q300	0
15	7SEG LED	*7	E20561-GFOR	DIP-18pin	SEG1	1
	7SEG LED	*7	TOD-5261BH-D-K	DIP-18pin	SEG1	0
	7SEG LED	*7	LN526RA	DIP-18pin	SEG1	0
16	CHIP-LED	*18	SUNR-063 (Rank10)	1608(0603) Color : Red 70 mcd (Don't mount both rank10 and rank11 on the same PCB.)	LED1 LED2 LED3 LED4 LED5 LED6	6
	CHIP-LED	*18	SUNR-063 (Rank11)	1608(0603) Color : Red 90 mcd (Don't mount both rank10 and rank11 on the same PCB.)	LED1 LED2 LED3 LED4 LED5 LED6	0
17	Diode		1N4003	Pitch=7.5mm	D2	1
18	Diode		1SS133-77	Pitch=7.5mm	D3 D4 D5	3
19	Shottky Diode	*15	RB160L-40TE25	PMDS SOD-106	D301	1
	Shottky Diode	*15	SK14	PMDS SOD-106	D301	0
20	Crystal Oscillator	*8	HC-49U/S 18.432MHz	2pin	X1	0
	Crystal Oscillator	*8	HC-49/S3 18.432MHz	2pin	X1	0
	Crystal Oscillator	*8	HC-49U/S 18.432MHz	2pin	X1	1
	Crystal Oscillator	*8	HC-49/S3 18.432MHz	2pin	X1	0
21	Chip Inductor		BLM18AG102S	1608(0603)	L14	1
22	Chip Inductor		LQH43CN220K03L	SMD 4532	L305	1
23	Chip Inductor		open-l	1608(0603)	L1 L2 L3 L4 L6 L7 L9 L10 L11 L12 L13	0
24	Capacitor		0.1u/50V	D=4.0 6.3mm H=7.0mm Pitch=5mm	C11	1
25	Capacitor		10u/16V	D=4.0 6.3mm H=7.0mm Pitch=5mm	C12 C23 C25 C82 C303	5
26	Capacitor		47u/16V	D=4.0 6.3mm H=7.0mm Pitch=5mm	C17 C18 C40 C41 C86	5
27	Capacitor		100u/16V	D=4.0 8.0mm H=7.0mm Pitch=5mm	C31 C32	2
28	Capacitor		470u/16V	D=4.0 8.0mm H=7.0 11.5mm Pitch=5mm	C38 C306	2
29	Capacitor		open-cp	D=4.0 6.3mm H=7.0 Pitch=5mm	C44 C45 C46 C47	0
30	Chip Capacitor		12p-J CH 50V (25V)	1608(0603)	C80 C81	2
31	Chip Capacitor		15p-J CH 50V (25V)	1608(0603)	C10	1
32	Chip Capacitor		22p-J CH 50V (25V)	1608(0603)	C83	1
33	Chip Capacitor		100p-J CH 50V (25V)	1608(0603)	C26 C27	2
34	Chip Capacitor		330p-J CH 50V (25V)	1608(0603)	C14	1
35	Chip Capacitor		220p-J CH 50V (25V)	1608(0603)	C305	1
36	Chip Capacitor		470p-J CH 50V (25V)	1608(0603)	C48	1
37	Chip Capacitor		2200p-K B 50V (25V)	1608(0603)	C28 C29 C304	3
38	Chip Capacitor		0.01u-K B 50V (25V)	1608(0603)	C1 C3 C4	3
39	Chip Capacitor		0.027u-K B 50V (25V)	1608(0603)	C9	1
40	Chip Capacitor		0.039u-K B 50V (25V)	1608(0603)	C8	1
41	Chip Capacitor		0.1u-Z F 25V	1608(0603)	C5 C7 C16 C19 C20 C21 C22 C24 C30 C33 C34 C39 C43 C49 C51 C52 C53 C54 C55 C56 C57 C58 C60 C62 C63 C64 C65 C66 C67 C68 C69 C71 C72 C73 C74 C75 C76 JP5 JP6	39

42	Chip Capacitor		GRM188B11A105KA61D (1.0u-K B)	1608(0603)	C6 C77 C78 C79	4
43	Chip Capacitor		open-c	1608(0603)	C2 C13 C35 C36 C37 C42 C50 C59 C61 C70 C84 C85	0
44	Film Capacitor		1500p-K 100V (50V)	Radial Pitch=5mm	C15	1
45	Resistor		18-J 2W	Lead-form : Floated type pitch=15mm	R54	1
46	Chip Resistor		0ohm	1608(0603)	R2 R20 R57 R87 R88 R89 R90 R92 R307	9
47	Chip Resistor		10-J	1608(0603)	R70 R71 R72 R73 R50 R51	6
48	Chip Resistor		220-J	1608(0603)	R13 R66 R309	3
49	Chip Resistor		510-J	1608(0603)	R19	1
50	Chip Resistor		470-J	1608(0603)	R312	1
51	Chip Resistor		620-J	1608(0603)	R25 R74 R75 R76 R77 R78 R79 R80 R81	9
52	Chip Resistor		1k-J	1608(0603)	R4 R311 R68	3
53	Chip Resistor		2.2k-J	1608(0603)	R23 R24 R310	3
54	Chip Resistor		5.6k-J	1608(0603)	R46 R47	2
55	Chip Resistor		8.2k-J	1608(0603)	R30 R31	2
56	Chip Resistor		10k-J	1608(0603)	R14 R17 R18 R26 R28 R34 R35 R43 R52 R53	10
57	Chip Resistor		20k-J	1608(0603)	R33	1
58	Chip Resistor		22k-J	1608(0603)	R21 R22 R44 R45	4
59	Chip Resistor		33k-J	1608(0603)	R48 R49	2
60	Chip Resistor		47k-J	1608(0603)	R3 R5 R6 R7 R16 R29 R60 R61 R82 R83 R84 R85 R86	13
61	Chip Resistor		51K-J	1608(0603)	R11 R12	2
62	Chip Resistor		510k-J	1608(0603)	R27	1
63	Chip Resistor		1M-J	1608(0603)	R65	1
64	Chip Resistor		15k-F	1608(0603)	R36	1
65	Chip Resistor		22k-F	1608(0603)	R55	1
66	Chip Resistor		100k-F	1608(0603)	R313	1
67	Chip Resistor		110k-F	1608(0603)	R32	1
68	Chip Resistor		240k-F	1608(0603)	R37	1
69	Chip Resistor		390k-F	1608(0603)	R314	1
70	Chip Resistor		open-r	1608(0603)	R1 R8 R9 R10 R15 R38 R39 R40 R41 R42 R56 R58 R59 R62 R63 R64 R67 R69 R93 R308 JP1 JP2 JP3 JP4	0
71	TACT SW	*13	1104RTA-2		SW1 SW2 SW3 SW4 SW5 SW7	0
	TACT SW	*13	SKRGAED010		SW1 SW2 SW3 SW4 SW5 SW7	6
	TACT SW	*13	EVQ11L05R		SW1 SW2 SW3 SW4 SW5 SW7	0
72	Potentiometer	*9	RK09D1130 (LM=20)	50k-B 16detent vertical	VR1	1
	Potentiometer	*9	RV09BF-40E1-115F-0B50K-0G31	50k-B 16detent vertical	VR1	0
	Potentiometer	*9	F-09115N-2+16C B50k-a0 L10FCx4.5(T)	50k-B 16detent vertical	VR1	0
73	Rotary Encoder		F-11EN7H20M+C L15Fx7(0)	Vertical type	SW6	1
74	Stereo Phone Jack	*10	SJ-6325-B		J4	1
	Stereo Phone Jack	*10	YKB21-5010		J4	0
75	Stereo Phone Jack	*11	SJ-6325-4P	with SW	J2	1
	Stereo Phone Jack	*11	YKB21-5074		J2	0
76	DC Jack	*12	DC-208B		J3	1
	DC Jack	*12	HEC2305-016250		J3	0
	DC Jack	*12	SCD438CCS0033B00G		J3	0
	DC Jack	*12	DS-208 D=2.0mm		J3	0
77	JP		open-jp	Pitch=5mm	L5 L8	0
78	PCB		PCB-0180	FR-4 2layer,		1

## Reflector PCB Partslist

PCB-0181

No.	NAME	SUB	SPECIFICATIONS	DESCRIPTION	REFERENCE No.	Q'ty
1	Photo Reflector		NJL5167KB	DIP-4	IC10	1
2	Harness		ZH-0076:3Pin 2.5mmPitch L=120mm	To MAIN PCB	includes connector	1
3	PCB		PCB-0181	FR-4 2layer part of MAIN PCB		1

## MECHANICAL PARTS LIST

No.	PART NAME	SUB	DROWING NO	MATERIAL	DESCRIPTION	QTY
1	G1X TOP CASE		Z2B-0255	ABS (natural)	(1)paint & silk print	1
2	BOTTOM CASE		Z2A-0141	SECC t=0.8	(2)	1
3	VR KNOB 1		Z2B-0228-B	ABS (black)	(4)	1
4	VR KNOB 2		Z2B-0229	ABS (black)	(5)	1
5	PCB SPACER		Z2B-0232	ABS (Chromium coating)	(8)	2
6	FOOT SW		Z2B-0227	ABS (black)	(3)	2
7	FOOT SW PLATE R (include TACT SW BUTTON)		Z2B-0233	ABS (black)	(9)	1
8	FOOT SW PLATE L (include TACT SW BUTTON)		Z2B-0234	ABS (black)	(11)	1
9	FOOT SW RUBBER		Z2D-0067	TPE ( GREEN )	(3)	2
10	FOOT SW SPRING		Z2A-0126	SUS 304 WPB, d=0.8	(19)	2
11	G1 DISPLAY SHEET		Z2E-0216	PCV / with adhesive tape, φ40mm t=1.0mm	(10)with silk print :3 colors	1
12	TACT SW BUTTON		Z2B-0256	ABS(black)	(12)	1
13	LED LENS		Z2B-0259	ABS(clear)	(15)	6
14	LED LENS HOLDER		Z2B-0260	ABS(black)	(16)	1
15	BATT CASE		Z2B-0230	ABS (black)	(6)	1
16	BATT CASE COVER		Z2B-0231	ABS (black)	(7)	1
17	BATT SPRING (+)		Z2A-0127	SUS304, d=0.7	(21)	1
18	BATT SPRING (-)		Z2A-0128	SUS304 d=0.7	(22)	1
19	BATT SPRING (+/-)		Z2A-0129	SUS304 d=0.7	(23)	1
20	BATTERY CUSHION		Z2E-0190	sponge, with adhesive tape	(7)73.4x10.2x3(t)mm	2
21	EX PEDAL		Z2B-0257	ABS(natural)	(13)paint	1
22	EX PEDAL SHAFT GUIDE		Z2B-0176	POM(white)	(17)	2
23	EX PEDAL SHAFT GUIDE B		Z2B-0269	POM(white)	(18)	2
24	EX PEDAL RUBBER		Z2B-0258	TPE(black)	(14)	1
25	EX PEDAL STOPPER 1		Z2D-0073	Rubber, Hardness=60, with adhesive tape	(23)30x15x3	1
26	EX PEDAL STOPPER 2		Z2D-0074	NBR, Hardness=50, with adhesive tape and hole	(24)30x15x4mm	1
27	EX PEDAL STOPPER 3		Z2D-0082	EVA, Hardness=65, with adhesive tape and hole	(25)30x15x4mm	1
28	FOOT RUBBER 1-L		Z2D-0075	Sponge rubber, Hardness=40, with adhesive tape	(26)120x20x3	1
29	FOOT RUBBER 2-L		Z2D-0078	Rubber, Hardness=60, with adhesive tape	(27)120x45x3, L-type	1
30	FOOT RUBBER 3-L		Z2D-0079	NBR, Hardness=65, with adhesive tape	(28)55x25x3mm	1
31	FOOT RUBBER 1-R		Z2D-0070	Sponge rubber, Hardness=40, with adhesive tape	(29)	1
32	FOOT RUBBER 2-R		Z2D-0071	Rubber, Hardness=60, with adhesive tape	(30)	1
33	SUPPORT FOOT RUBBER		Z2D-0072	Rubber, Hardness=65, with adhesive tape	(31)6x20x3.3mm	2
34	REFLECT RUBBER2		Z2D-0091	Sponge, with adhesive tape	(37)	1
35	SCREW	M3X8 P-tight			(32)	14
36	SCREW	M3x10 P-tight			(33)	2
37	CAP SCREW	M6x65		HEXAGON SOCKET HEAD, M6x65	(35)BLACK CHROMATE	1
38	HEXAGON U NUT	M6		M6	(36)BLACK CHROMATE	1
39	REFLECT SEAL		Z2E-5032-A4	for PHOTO REFLECTOR	(34)10x10x0.05mm	1
40	Lubricant			Molycote E Paste (White), Specific gravity: 1.16g per cubic cm	For EX PEDAL SHAFT GUIDE	1
41	Glue			SL518	For EX PEDAL RUBBER	1

## PACKING PARTS LIST

No.	PART NAME	SUB	SPECIFICATIONS	MATERIAL	DESCRIPTION	120US QTY
1	G1X Gift Box		Z2F-0050	corrugated cardboard.	Printing color : 4C	1
	G1 AC Adapter Spacer		Z2F-0057	corrugated cardboard, A3b, T=3mm	Printing color : Black	1
2	G1X MASTER Carton Box		Z2F-0051	double wall corrugated cardboard.	Printing color : Black	0.1
3	Poly Bag for Unit			257X364mm (B4 size)		1
4	Poly Bag for Manual			200X300mm (for A5 size)		1
5	Serial Label for Carton Box		Z2E-0192			0.1
6	Serial Label for Unit		Z2E-0193			2
7	G1X JAN Bar-Code Label		Z8F-0093-A4 for CM			0
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 120US			2.1
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 120GL			0
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 220BX			0
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 240UK			0
8	G1X USA Bar-Code Label for Gift Box		A78			1
	G1X USA Bar-Code Label for Carton Box		A78			0.1
9	FCC Label		Z2I-0729	Aluminum label		1
10	Destination Label		Z2E-0194 for CM			0
	Destination Label		Z2E-0194 for 120US			0.2
	Destination Label		Z2E-0194 for 120GL			0
	Destination Label		Z2E-0194 for 220BX			0
	Destination Label		Z2E-0194 for 240UK			0
11	G1/G1X Operation Manual		G1/G1X-5010-1	paper of fine quality, A5 28page, Warranty Card JP sticks on a back cover.	JAPANESE	0
12	G1/G1X Operation Manual		G1/G1X-5000-1	paper of fine quality A5 28page	ENGLISH	1
13	G1/G1X Operation Manual		G1/G1X-5002-1	paper of fine quality A5 28page	GERMAN	0
14	G1/G1X Operation Manual		G1/G1X-5003-1	paper of fine quality A5 28page	FRENCH	0
15	G1/G1X Operation Manual		G1/G1X-5004-1	paper of fine quality A5 28page	ITALIAN	0
16	G1/G1X Operation Manual		G1/G1X-5005-1	paper of fine quality A5 28page	SPANISH	0
17	G1/G1X Operation Manual		G1/G1X-5006-1	paper of fine quality A5 28page	PORTUGUESE	0
18	G1/G1X Operation Manual		G1/G1X-5007-1	paper of fine quality A5 28page	CHINESE	0
19	Warranty Card US		Z2I-0730	Stamp: none	for US	1
20	G1/G1X Patch List Sheet		Z2I-0725	A4 Both side printing Language:Japanese and English		1
21	G1X Logo Label for Unit		Z2E-0220	Aluminum label		1
22	G1/G1X Display signal chart sheet		Z2I-0726	Film-coated paper Both side printing		1
23	AC Adaptor		AD-0006D for 120US and 120GL	with gift box	Supplied by ZOOM	1
24	AC Adaptor		AD-0006E for 220BX	with gift box	Supplied by ZOOM	0
25	AC Adaptor		AD-0006F for 240UK	with gift box	Supplied by ZOOM	0
26	ZOOM Logo Tape		Z2E-0218			0.005



# Parts List

\*Serial No. 022151 -

## MAIN PCB Partslist

PCB-0180

No.	NAME	SUB	SPECIFICATIONS	DESCRIPTION	REFERENCE No.	Q'ty
1	MPU	*16	UPD78F0537GB(T)-UEU-A	LQFP-64pin 10x10	IC1	0
	MPU	*16	UPD78F0537GB(T)-601-UEU-A	LQFP-64pin 10x10	IC1	1
2	DSP		ZFX-3	LQFP-176pin 0.5-26X26	IC7	1
3	SDRAM	*2	P2V16S406TP-6G	TSOP-50pin	IC8	0
	SDRAM	*2	IS42S16100C1-7TL	TSOP-50pin	IC8	0
	SDRAM	*2	RMS116T(LF)-7A	TSOP-50pin	IC8	0
	SDRAM	*2	EM636165TS-7G	TSOP-50pin	IC8	1
4	AD/DA		WM8734SEFLR	QFN-28pin 5x5	IC4	1
5	LOGIC IC	*3	SN74HCU04ANSR	SOP-14pin	IC9	1
	LOGIC IC	*3	SN74HCU04DR	SOIC-14pin	IC9	0
	LOGIC IC	*3	SN74LVU04ANSR	SOP-14pin	IC9	0
	LOGIC IC	*3	SN74HCU04NSR	SOP-14pin	IC9	0
	LOGIC IC	*3	MC74HCU04ADR	SOIC-14pin	IC9	0
6	OPAMP		NJM2100V-TE1	SSOP-8pin	IC2 IC6	2
7	OPAMP		NJU7082BV-TE1	SSOP-8pin	IC5	1
8	Voltage Regulator	*4	uPC2933BT1D-AT	TO252	IC3	0
	Voltage Regulator	*4	uPC2933BT-AZ	SC63	IC3	0
	Voltage Regulator	*4	LR1116AL-33-TN3-D-R	TO252	IC3	1
9	DC-DC converter		XC6365B103MR	SOT-23-5	IC301	1
10	D-Transistor	*5	MUN5135DW1T1G	SC88	DT1	1
	D-Transistor	*5	UMB10N	SC88	DT1	0
11	D-Transistor	*17	DTA-123JKA	SC59	DT2	1
	D-Transistor	*17	KRA105S	SOT23	DT2	0
	D-Transistor	*17	BCR158	SOT23	DT2	0
12	Transistor	*6	BC817-40	SC59	Q1	1
	Transistor	*6	BC817-40LT1G	SC59	Q1	0
13	Transistor		KTA1001-Y	SC62	Q301	1
14	Transistor		open-tr	SC59	Q300	0
15	7SEG LED	*7	E20561-GFOR	DIP-18pin	SEG1	1
	7SEG LED	*7	TOD-5261BH-D-K	DIP-18pin	SEG1	0
	7SEG LED	*7	LN526RA	DIP-18pin	SEG1	0
16	CHIP-LED	*18	SUNR-063 (Rank10)	1608(0603) Color : Red 70 mcd (Don't mount both rank10 and rank11 on the same PCB.)	LED1 LED2 LED3 LED4 LED5 LED6	6
	CHIP-LED	*18	SUNR-063 (Rank11)	1608(0603) Color : Red 90 mcd (Don't mount both rank10 and rank11 on the same PCB.)	LED1 LED2 LED3 LED4 LED5 LED6	0
17	Diode		1N4003	Pitch=7.5mm	D2	1
18	Diode		1SS133-77	Pitch=7.5mm	D3 D4 D5	3
19	Shottky Diode	*15	RB160L-40TE25	PMDS SOD-106	D301	1
	Shottky Diode	*15	SK14	PMDS SOD-106	D301	0
20	Crystal Oscillator	*8	HC-49U/S 18.432MHz	2pin	X1	0
	Crystal Oscillator	*8	HC-49/S3 18.432MHz	2pin	X1	0
	Crystal Oscillator	*8	HC-49U/S 18.432MHz	2pin	X1	1
	Crystal Oscillator	*8	HC-49/S3 18.432MHz	2pin	X1	0
21	Chip Inductor		BLM18AG102S	1608(0603)	L14	1
22	Chip Inductor		LQH43CN220K03L	SMD 4532	L305	1
23	Chip Inductor		open-l	1608(0603)	L1 L2 L3 L4 L6 L7 L9 L10 L11 L12 L13	0
24	Capacitor		0.1u/50V	D=4.0 6.3mm H=7.0mm Pitch=5mm	C11	1
25	Capacitor		10u/16V	D=4.0 6.3mm H=7.0mm Pitch=5mm	C12 C23 C25 C82 C303	5
26	Capacitor		47u/16V	D=4.0 6.3mm H=7.0mm Pitch=5mm	C17 C18 C40 C41 C86	5
27	Capacitor		100u/16V	D=4.0 8.0mm H=7.0mm Pitch=5mm	C31 C32	2
28	Capacitor		470u/16V	D=4.0 8.0mm H=7.0 11.5mm Pitch=5mm	C38 C306	2
29	Capacitor		open-cp	D=4.0 6.3mm H=7.0 Pitch=5mm	C44 C45 C46 C47	0
30	Chip Capacitor		12p-J CH 50V (25V)	1608(0603)	C80 C81	2
31	Chip Capacitor		15p-J CH 50V (25V)	1608(0603)	C10	1
32	Chip Capacitor		22p-J CH 50V (25V)	1608(0603)	C83	1
33	Chip Capacitor		100p-J CH 50V (25V)	1608(0603)	C26 C27	2
34	Chip Capacitor		330p-J CH 50V (25V)	1608(0603)	C14	1
35	Chip Capacitor		220p-J CH 50V (25V)	1608(0603)	C305	1
36	Chip Capacitor		470p-J CH 50V (25V)	1608(0603)	C48	1
37	Chip Capacitor		2200p-K B 50V (25V)	1608(0603)	C28 C29 C304	3
38	Chip Capacitor		0.01u-K B 50V (25V)	1608(0603)	C1 C3 C4	3
39	Chip Capacitor		0.027u-K B 50V (25V)	1608(0603)	C9	1
40	Chip Capacitor		0.039u-K B 50V (25V)	1608(0603)	C8	1
41	Chip Capacitor		0.1u-Z F 25V	1608(0603)	C5 C7 C16 C19 C20 C21 C22 C24 C30 C33 C34 C39 C43 C49 C51 C52 C53 C54 C55 C56 C57 C58 C60 C62 C63 C64 C65 C66 C67 C68 C69 C71 C72 C73 C74 C75 C76 JP5 JP6	39

42	Chip Capacitor		GRM188B11A105KA61D (1.0u-K B)	1608(0603)	C6 C77 C78 C79	4
43	Chip Capacitor		open-c	1608(0603)	C2 C13 C35 C36 C37 C42 C50 C59 C61 C70 C84 C85	0
44	Film Capacitor		1500p-K 100V (50V)	Radial Pitch=5mm	C15	1
45	Resistor		18-J 2W	Lead-form : Floated type pitch=15mm	R54	1
46	Chip Resistor		0ohm	1608(0603)	R2 R20 R57 R87 R88 R89 R90 R92 R307	9
47	Chip Resistor		10-J	1608(0603)	R70 R71 R72 R73 R50 R51	6
48	Chip Resistor		220-J	1608(0603)	R13 R66 R309	3
49	Chip Resistor		510-J	1608(0603)	R19	1
50	Chip Resistor		470-J	1608(0603)	R312	1
51	Chip Resistor		620-J	1608(0603)	R25 R74 R75 R76 R77 R78 R79 R80 R81	9
52	Chip Resistor		1k-J	1608(0603)	R4 R311 R68	3
53	Chip Resistor		2.2k-J	1608(0603)	R23 R24 R310	3
54	Chip Resistor		5.6k-J	1608(0603)	R46 R47	2
55	Chip Resistor		8.2k-J	1608(0603)	R30 R31	2
56	Chip Resistor		10k-J	1608(0603)	R14 R17 R18 R26 R28 R34 R35 R43 R52 R53	10
57	Chip Resistor		20k-J	1608(0603)	R33	1
58	Chip Resistor		22k-J	1608(0603)	R21 R22 R44 R45	4
59	Chip Resistor		33k-J	1608(0603)	R48 R49	2
60	Chip Resistor		47k-J	1608(0603)	R3 R5 R6 R7 R16 R29 R60 R61 R82 R83 R84 R85 R86	13
61	Chip Resistor		51K-J	1608(0603)	R11 R12	2
62	Chip Resistor		510k-J	1608(0603)	R27	1
63	Chip Resistor		1M-J	1608(0603)	R65	1
64	Chip Resistor		15k-F	1608(0603)	R36	1
65	Chip Resistor		22k-F	1608(0603)	R55	1
66	Chip Resistor		100k-F	1608(0603)	R313	1
67	Chip Resistor		110k-F	1608(0603)	R32	1
68	Chip Resistor		240k-F	1608(0603)	R37	1
69	Chip Resistor		390k-F	1608(0603)	R314	1
70	Chip Resistor		open-r	1608(0603)	R1 R8 R9 R10 R15 R38 R39 R40 R41 R42 R56 R58 R59 R62 R63 R64 R67 R69 R93 R308 JP1 JP2 JP3 JP4	0
71	TACT SW	*13	1104RTA-2		SW1 SW2 SW3 SW4 SW5 SW7	0
	TACT SW	*13	SKRGAED010		SW1 SW2 SW3 SW4 SW5 SW7	6
	TACT SW	*13	EVQ11L05R		SW1 SW2 SW3 SW4 SW5 SW7	0
72	Potentiometer	*9	RK09D1130 (LM=20)	50k-B 16detent vertical	VR1	1
	Potentiometer	*9	RV09BF-40E1-115F-0B50K-0G31	50k-B 16detent vertical	VR1	0
	Potentiometer	*9	F-09115N-2+16C B50k-a0 L10FCx4.5(T)	50k-B 16detent vertical	VR1	0
73	Rotary Encoder		F-11EN7H20M+C L15Fx7(0)	Vertical type	SW6	1
74	Stereo Phone Jack	*10	SJ-6325-B		J4	1
	Stereo Phone Jack	*10	YKB21-5010		J4	0
75	Stereo Phone Jack	*11	SJ-6325-4P	with SW	J2	1
	Stereo Phone Jack	*11	YKB21-5074		J2	0
76	DC Jack	*12	DC-208B		J3	1
	DC Jack	*12	HEC2305-016250		J3	0
	DC Jack	*12	SCD438CCS0033B00G		J3	0
	DC Jack	*12	DS-208 D=2.0mm		J3	0
77	JP		open-jp	Pitch=5mm	L5 L8	0
78	PCB		PCB-0180	FR-4 2layer,		1

## Reflector PCB Partslist

PCB-0181

No.	NAME	SUB	SPECIFICATIONS	DESCRIPTION	REFERENCE No.	Q'ty
1	Photo Reflector		NJL5167KB	DIP-4	IC10	1
2	Harness		ZH-0076:3Pin 2.5mmPitch L=120mm	To MAIN PCB	includes connector	1
3	PCB		PCB-0181	FR-4 2layer part of MAIN PCB		1

## MECHANICAL PARTS LIST

No.	PART NAME	SUB	DROWING NO	MATERIAL	DESCRIPTION	Q'TY
1	G1X TOP CASE		Z2B-0255	ABS (natural)	(1)paint & silk print	1
2	BOTTOM CASE		Z2A-0141	SECC t=0.8	(2)	1
3	VR KNOB 1		Z2B-0228-B	ABS (black)	(4)	1
4	VR KNOB 2		Z2B-0229	ABS (balck)	(5)	1
5	PCB SPACER		Z2B-0232	ABS (Chromium coating)	(8)	2
6	FOOT SW		Z2B-0227	ABS (black)	(3)	2
7	FOOT SW PLATE R (include TACT SW BUTTON)		Z2B-0233	ABS (black)	(9)	1
8	FOOT SW PLATE L (include TACT SW BUTTON)		Z2B-0234	ABS (black)	(11)	1
9	FOOT SW RUBBER		Z2D-0067	TPE ( GREEN )	(3)	2
10	FOOT SW SPRING		Z2A-0126	SUS 304 WPB, d=0.8	(19)	2
11	G1 DISPLAY SHEET		Z2E-0216	PCV / with adhesive tape, φ40mm t=1.0mm	(10)with silk print :3 colors	1
12	TACT SW BUTTON		Z2B-0256	ABS(black)	(12)	1
13	LED LENS		Z2B-0259	ABS(clear)	(15)	6
14	LED LENS HOLDER		Z2B-0260	ABS(black)	(16)	1
15	BATT CASE		Z2B-0230	ABS (black)	(6)	1
16	BATT CASE COVER		Z2B-0231	ABS (black)	(7)	1
17	BATT SPRING (+)		Z2A-0127	SUS304, d=0.7	(21)	1
18	BATT SPRING (-)		Z2A-0128	SUS304 d=0.7	(22)	1
19	BATT SPRING (+/-)		Z2A-0129	SUS304 d=0.7	(23)	1
20	BATTERY CUSHION		Z2E-0190	sponge, with adhesive tape	(7)73.4x10.2x3(t)mm	2
21	EX PEDAL		Z2B-0257	ABS(natural)	(13)paint	1
22	EX PEDAL SHAFT GUIDE		Z2B-0176	POM(white)	(17)	2
23	EX PEDAL SHAFT GUIDE B		Z2B-0269	POM(white)	(18)	2
24	EX PEDAL RUBBER		Z2B-0258	TPE(black)	(14)	1
25	EX PEDAL STOPPER 1		Z2D-0073	Rubber, Hardness=60, with adhesive tape	(23)30x15x3	1
26	EX PEDAL STOPPER 2		Z2D-0074	NBR, Hardness=50, with adhesive tape and hole	(24)30x15x4mm	1
27	EX PEDAL STOPPER 3		Z2D-0082	EVA, Hardness=65, with adhesive tape and hole	(25)30x15x4mm	1
28	FOOT RUBBER 1-L		Z2D-0075	Sponge rubber, Hardness=40, with adhesive tape	(26)120x20x3	1
29	FOOT RUBBER 2-L		Z2D-0078	Rubber, Hardness=60, with adhesive tape	(27)120x45x3, L-type	1
30	FOOT RUBBER 3-L		Z2D-0079	NBR, Hardness=65, with adhesive tape	(28)55x25x3mm	1
31	FOOT RUBBER 1-R		Z2D-0070	Sponge rubber, Hardness=40, with adhesive tape	(29)	1
32	FOOT RUBBER 2-R		Z2D-0071	Rubber, Hardness=60, with adhesive tape	(30)	1
33	SUPPORT FOOT RUBBER		Z2D-0072	Rubber, Hardness=65, with adhesive tape	(31)6x20x3.3mm	2
34	Optical interception cover		Z2D-0092	TPE, Hardness=60-70	(37)	1
35	SCREW	M3X8 P-tight			(32)	14
36	SCREW	M3x10 P-tight			(33)	2
37	CAP SCREW	M6x65		HEXAGON SOCKET HEAD, M6x65	(35)BLACK CHROMATE	1
38	HEXAGON U NUT	M6		M6	(36)BLACK CHROMATE	1
39	REFLECT SEAL	Z2E-5032-A4		for PHOTO REFLECTOR	(34)10x10x0.05mm	1
40	Lubricant			Molycote E Paste (White), Specific gravity: 1.16g per cubic cm	For EX PEDAL SHAFT GUIDE	1
41	Glue			SL518	For EX PEDAL RUBBER	1

## PACKING PARTS LIST

No.	PART NAME	SUB	SPECIFICATIONS	MATERIAL	DESCRIPTION	120US Q'TY
1	G1X Gift Box		Z2F-0050	corrugated cardboard.	Printing color : 4C	1
	G1 AC Adapter Spacer		Z2F-0057	corrugated cardboard, A3b, T=3mm	Printing color : Black	1
2	G1X MASTER Carton Box		Z2F-0051	double wall corrugated cardboard.	Printing color : Black	0.1
3	Poly Bag for Unit			257X364mm (B4 size)		1
4	Poly Bag for Manual			200X300mm (for A5 size)		1
5	Serial Label for Carton Box		Z2E-0192			0.1
6	Serial Label for Unit		Z2E-0193			2
7	G1X JAN Bar-Code Label		Z8F-0093-A4 for CM			0
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 120US			2.1
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 120GL			0
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 220BX			0
	G1X JAN Bar-Code Label		Z8F-0093-A4 for 240UK			0
8	G1X USA Bar-Code Label for Gift Box		A78			1
	G1X USA Bar-Code Label for Carton Box		A78			0.1
9	FCC Label		Z2I-0729	Aluminum label		1
10	Destination Label		Z2E-0194 for CM			0
	Destination Label		Z2E-0194 for 120US			0.2
	Destination Label		Z2E-0194 for 120GL			0
	Destination Label		Z2E-0194 for 220BX			0
	Destination Label		Z2E-0194 for 240UK			0
11	G1/G1X Operation Manual		G1/G1X-5010-1	paper of fine quality, A5 28page, Warranty Card JP sticks on a back cover.	JAPANESE	0
12	G1/G1X Operation Manual		G1/G1X-5000-1	paper of fine quality A5 28page	ENGLISH	1
13	G1/G1X Operation Manual		G1/G1X-5002-1	paper of fine quality A5 28page	GERMAN	0
14	G1/G1X Operation Manual		G1/G1X-5003-1	paper of fine quality A5 28page	FRENCH	0
15	G1/G1X Operation Manual		G1/G1X-5004-1	paper of fine quality A5 28page	ITALIAN	0
16	G1/G1X Operation Manual		G1/G1X-5005-1	paper of fine quality A5 28page	SPANISH	0
17	G1/G1X Operation Manual		G1/G1X-5006-1	paper of fine quality A5 28page	PORTUGUESE	0
18	G1/G1X Operation Manual		G1/G1X-5007-1	paper of fine quality A5 28page	CHINESE	0
19	Warranty Card US		Z2I-0730	Stamp: none	for US	1
20	G1/G1X Patch List Sheet		Z2I-0725	A4 Both side printing Language:Japanese and English		1
21	G1X Logo Label for Unit		Z2E-0220	Aluminum label		1
22	G1/G1X Display signal chart sheet		Z2I-0726	Film-coated paper Both side printing		1
23	AC Adaptor		AD-0006D for 120US and 120GL	with gift box	Supplied by ZOOM	1
24	AC Adaptor		AD-0006E for 220BX	with gift box	Supplied by ZOOM	0
25	AC Adaptor		AD-0006F for 240UK	with gift box	Supplied by ZOOM	0
26	ZOOM Logo Tape		Z2E-0218			0.005

# Spare Parts Order List

The parts with "" are available from G1X

## PCB

CODE No.	PART NAME	SPECIFICATIONS	DESCRIPTION	Q'TY	PRICE (Japanese yen)
<b>PCB ASSEMBLY</b>					
SP40175	G1X Main PCB assy	PCB-0180, PCB-0181	FR-4 2layer,138.2mm x 92mm (PCB-0180, include PCB-0181)	1	3290

## MAIN PCB Partslist : PCB-0180

CODE No.	PART NAME	SPECIFICATIONS	COMMON USE	Q'TY	PRICE (Japanese yen)
<b>MICRO PROCESSOR</b>					
SP02349	MPU	UPD78F0537GB(T)-601-UEU-A (for G1/G1X)	G1	1	
<b>SIGNAL PROCESSOR</b>					
SP02033	DSP	ZFX-3	G1, B1, G2Series, G7.1ut, G9.2tt	1	1530
<b>MEMORY</b>					
SP02148	SDRAM	EM636165TS-7G (Same as SP2034)	G1, B1, G7.1ut, G9.2tt	1	190
<b>A/D,D/A CONVERTER</b>					
SP02350	AD/DA	WM8734SEFL/R	G1, B1,	1	340
<b>DIGITAL IC</b>					
SP02036	LOGIC IC	SN74HCU04ANSR	G1, B1, G2Series	1	30
<b>ANALOG</b>					
SP00752	OPAMP	NJM2100V-TE1	G1, B1, MRS-4, MRS-8, PS-04, PS-02, MRS-1608	1	60
SP00703	OPAMP	NJU7082BV-TE1	G1, B1, MRS-4, MRS-8, PS-04, PS-02	1	110
<b>POWER SUPPLY</b>					
SP02351	Voltage Regulator	uPC2933BT (Same as LR1116AL-33-TN3-D-R)	G1, B1	1	60
SP02352	DC-DC converter	XC6365B103MR	G1, B1	1	150
<b>TRANSISTOR</b>					
SP00923	D-Transistor	DTA-123JKA	MRS-1044	10	140
SP00628	D-Transistor	MUN5135DW1T1G (Same as UMB10N)	G1, B1, G2Series, MRS-8, RT-223, GFX-1, MRS-1608, etc	10	390
SP02040	Transistor	BC817-40	G1, B1, G2Series	10	140
SP02353	Transistor	KTA1001-Y	G1	10	210
<b>DISPLAY DEVICE</b>					
SP02046	7SEG LED	E20561-GFOR	G1, B1, G2Series, G7.1ut, G9.2tt	1	90
<b>DIODE</b>					
SP00123	Diode	1N4003	G7.1ut, G9.2tt, G1, B1, G2Series, GFX-1, GFX-3, GFX-8 etc	5	80
SP00352	Diode	1SS133T-77	G7.1ut, G9.2tt, G1, B1, G2Series, GFX-3, GFX-5, MRS-1608 etc	5	30
SP00704	Chip Shottky Diode	RB160L-40TE25	G7.1ut, G9.2tt, G1, B1, G2Series, MRT-3, MRS-4, PS-02, PS-04	5	150
<b>OSCILLATOR</b>					
SP02354	Crystal Oscillator	HC-49U/S 18.432MHz (SKC)	G1, B1	1	70
<b>INDUCTOR</b>					
SP01762	Chip Inductor	BLM18AG102SN1	G7.1ut, G9.2tt, G1, B1, G2Series, MRS-8	10	150
SP02043	Chip Inductor	LQH43CN220K03L	G1, B1, G2Series	1	30
<b>RESISTOR</b>					
SP02355	Resistor	18-J 2W	G1, B1	1	20
<b>SWITCH</b>					
SP00671	TACT SW	SKRGAED010 (Same as EVQ11L05R, SKQNAE)	G7.1ut, G9.2tt, G1, B1, G2Series, GFX-1, GFX-3	10	110
<b>POTENTIOMETER</b>					
SP02356	Potentiometer	RK09D1130 (Same as RV09BF-40E1-115F-0B50K-0G31)	G1, B1	1	60
<b>ENCODER</b>					
SP02357	Rotary Encoder	F-11EN7H20M+C L15Fx7(0)	G1, B1	1	70
<b>JACK, SOCKET</b>					
SP00440	Stereo Phone Jack	SJ-6325-B (Same as YKB21-5010)	G1, B1, 505, 505SK, GFX-707, GFX-708	1	50
SP01920	Stereo Phone Jack	SJ-6325-4P (Same as YKB21-5074)	G1, B1, MRS-8, PS-02, MRS-1044, MRS-802, MRS-1608	1	40
SP01950	DC Jack	DC-208B (Same as DC-208)	G1, B1, G2Series	1	30

## Reflector PCB Partslist : PCB-0181

CODE No.	PART NAME	SPECIFICATIONS	COMMON USE	Q'TY	PRICE (Japanese yen)
<b>PHOTO REFLECTOR</b>					
SP00457	Photo Reflector	NJL5167KB	707II, GFX-3, GFX-5, 606, G2Series, G7.1ut, G9.2tt	1	30
<b>OTHER PARTS</b>					
SP02390	Harness	3Pin 2.5mmPitch L=120mm		1	20

## MECHANICAL PARTS LIST

CODE No.	PART NAME	DRAWING NO	COMMON USE	Q'TY	PRICE (Japanese yen)
<b>TOP COVER</b>					
SP02391	G1X TOP CASE	Z2B-0255		1	280
<b>LOWER PANEL</b>					
SP02392	BOTTOM CASE	Z2A-0141		1	90
<b>FOOT PEDAL</b>					
SP02393	EX PEDAL	Z2B-0257		1	120
SP02104	EX PEDAL SHAFT GUIDE	Z2B-0176	G2Series	1	10
SP02394	EX PEDAL SHAFT GUIDE B	Z2B-0269		1	10
<b>BUTTON, KNOB</b>					
SP02361	VR KNOB 1	Z2B-0228-B	G1, B1	1	10
SP02362	VR KNOB 2	Z2B-0229	G1, B1	1	10
SP02395	TACT SW BUTTON	Z2B-0256		1	10
SP02360	FOOT SW ASSY	Z2B-0227, Z2D-0067	G1, B1	1	30
SP02374	FOOT SW PLATE R	Z2B-0233	G1, B1	1	20
SP02375	FOOT SW PLATE L	Z2B-0234	G1, B1	1	20
<b>SHEET, COLOR FILTER</b>					
SP02363	G1 DISPLAY SHEET	Z2E-0216	G1	1	10
SP01535	REFLECT SEAL	Z2E-5032-A4	G7.1ut, G9.2tt, G2.1u, GFX-3, GFX-5, GFX-8, 707II etc		10
<b>RUBBER, SPRING</b>					
SP02396	EX PEDAL RUBBER	Z2B-0258		1	110
SP02397	EX PEDAL STOPPER 1	Z2D-0073		1	10
SP02398	EX PEDAL STOPPER 2	Z2D-0074		1	20
SP02399	EX PEDAL STOPPER 3	Z2D-0082		1	10
SP02400	FOOT RUBBER 1-L	Z2D-0075		1	40
SP02401	FOOT RUBBER 2-L	Z2D-0078		1	20
SP02402	FOOT RUBBER 3-L	Z2D-0079		1	30
SP02366	FOOT RUBBER 1-R	Z2D-0070	G1, B1	1	10
SP02367	FOOT RUBBER 2-R	Z2D-0071	G1, B1	1	20
SP02368	SUPPORT FOOT RUBBER	Z2D-0072	G1, B1	1	10
SP02403	Optical interception cover	Z2D-0092		1	40
SP02369	FOOT SW SPRING	Z2A-0126	G1, B1	1	10
SP02370	BATT SPRING (+)	Z2A-0127	G1, B1	1	10
SP02371	BATT SPRING (-)	Z2A-0128	G1, B1	1	10
SP02372	BATT SPRING (+/-)	Z2A-0129	G1, B1	1	10
<b>SCREW, WASHER, NUT</b>					
SP01185	SCREW	M3x8L P-tight, SWCH(Fe), Chromate	G7.1ut, G9.2tt, G1, B1, G2Series, MRT-3	10	20
SP02074	SCREW	M3x10 P-tight, SWCH(Fe), Chromate	G1, B1, G2Series	10	10
SP02119	CAP SCREW	M6x65	G2.1u, B2.1u, A2.1u	1	30
SP01548	HEXAGON U NUT	M6	G2.1u, B2.1u, A2.1u, GFX-3	1	10
<b>OTHER MOULDING PARTS</b>					
SP02373	PCB SPACER	Z2B-0232	G1	1	10
SP02376	BATT CASE	Z2B-0230	G1	1	50
SP02377	BATT CASE COVER ASSY	Z2B-0231, Z2E-0190	G1	1	30
SP02404	LED LENS	Z2B-0259		1	10
SP02405	LED LENS HOLDER	Z2B-0260		1	20

## PACKING PARTS LIST

CODE No.	PART NAME	DRAWING NO	COMMON USE	Q'TY	PRICE (Japanese yen)
<b>CARTON BOX</b>					
* KS00184	G1X Gift Box	Z2F-0050		1	80
KS00179	G1 AC Adapter Spacer	Z2F-0057	G1, B1	1	10
* KS00185	G1X MASTER Carton Box	Z2F-0051		1	250
<b>LABEL, SEAL</b>					
SP01189	FCC Label	Z2I-0729	G7.1ut, G9.2tt, G1, B1, G2Series,GFX-1,GFX-3,MRT-3B,MRS-4B	1	10
<b>CARD, SHEET</b>					
SP00984	Warranty Card US	Z2I-0730	G1, B1	1	20
SP02378	G1/G1X Patch List Sheet	Z2I-0725	G1	1	10
* SP02406	G1X Logo Label for Unit	Z2E-0220		1	10
SP02380	G1/G1X Display signal chart sheet	Z2I-0726	G1	1	10

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Memo:

Company:

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

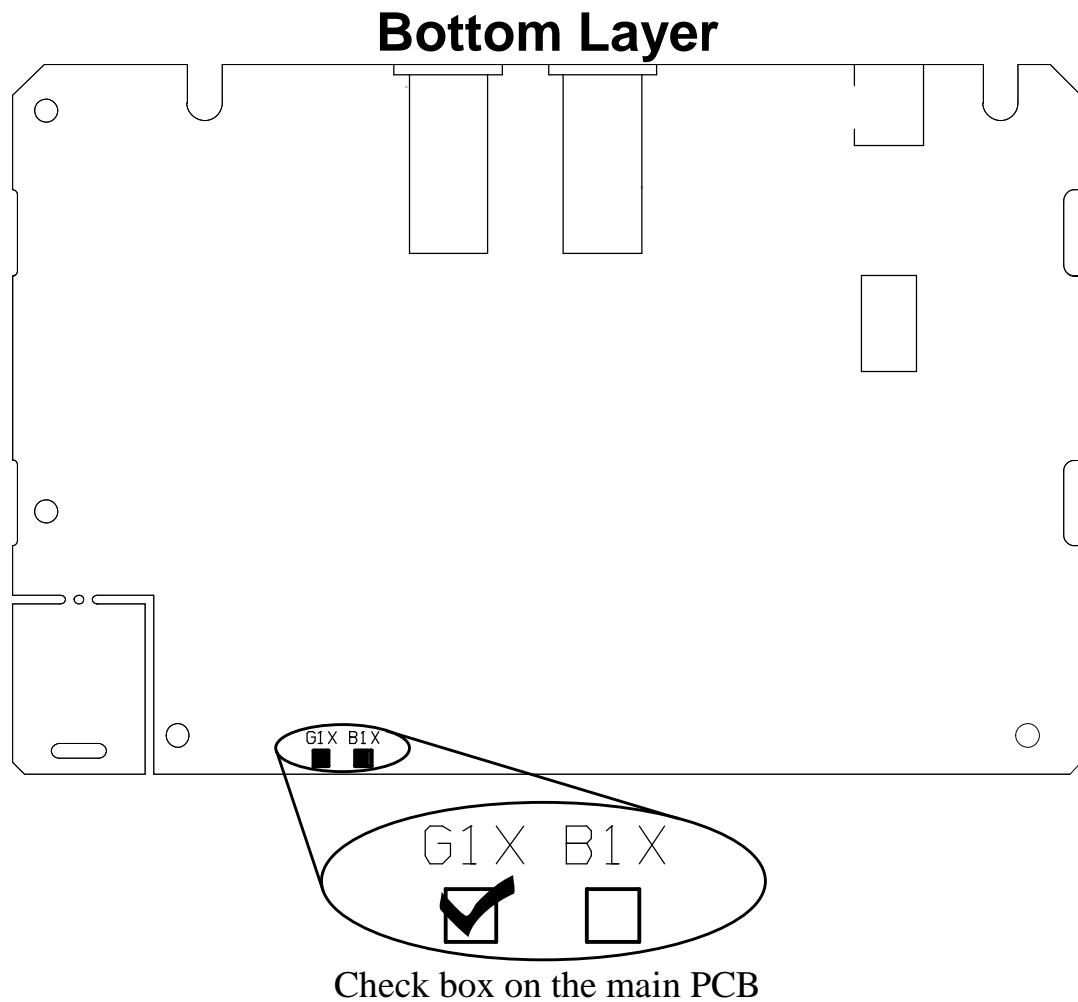
**ZOOM CORPORATION**

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# Supplement: Identification of main PCB

Main PCB is common use for other production. Therefore, this main PCB has check box to identify which production will be used for.

See below figure, it shows check box location on the main PCB.



## Supplement : The major difference between before No.022150 and after No.022151

Page	Contents	Item	before No.022150	after No.022151
5	Function test	5.Product number	"87" or "11"	"d2"
14	Special start up	Version	10	12
14	Special start up	Revision	46	48
20, 21	Exploded view	No.37	Refract rubber	Optical interception cover
24, 27	Partslist	Mechanical parts No.34	Refract rubber	Optical interception cover



G1X Service Manual Change History

Date	Page	Change
22 Jun 2007	28-29	Complete price list